THATCHING IN CAMBRIDGESHIRE

CHRISTOPHER PAUL STANFORD

A thesis submitted in partial fulfillment of the requirements of the University of Greenwich for the Degree of Doctor of Philosophy

April 2002

DECLARATION

I certify that this work had not been accepted in substance for any degree, and is not concurrently submitted for any degree other than that of Doctor of Philosophy (PhD) of the University of Greenwich. I also declare that this work is the result of my own investigations except where otherwise stated.

Signed. Date..

ABSTRACT

A brief introduction defines the aims of the thesis in which thatching is analysed in Cambridgeshire as a living craft. The first chapter sets the historical context of thatching as a means of providing a waterproof roof in England and more particularly in Cambridgeshire, and how, over the years, this form of roof is now largely restricted to small houses in the countryside. Most of Cambridgeshire's thatched houses are small, were built for agricultural workers and small yeoman farmers, and have a form, though not necessarily a fabric, which is five centuries old. They are mostly thatched in wheat straw, but a significant minority is thatched in water reed. These houses are now increasingly owned by people employed in towns who, thanks to the motorcar, choose to live in villages and like the idea of living in a thatched cottage. Practically all of these houses are listed and protected by conservation laws and regulations

Chapter 2 examines the various materials used for thatching in Cambridgeshire, particularly wheat straw and water reed. How they are grown, harvested and prepared for use is explained, together with an analysis of their specific qualities and life expectancy. How the age of a thatched roof may be judged is set out in detail, and the method of doing so was applied to the thatched roofs of twenty-five parishes, and also to a number of old photographs of thatched roofs.

Chapter 3 examines the characteristics of Cambridgeshire roofs, specifically those that were designed for a covering of thatch and what obstacles modern roofs present to the thatcher today. Chapter 4 then examines the training of the thatcher, most particularly the traditional form of apprenticeship still in use, why this continues and how it has been little affected by attempts to introduce government-sponsored training schemes. The methods of working are then analysed, and this again shows the continuing survival of traditional practices.

Chapter 5 provides a detailed explanation of precisely how Cambridgeshire roofs are thatched in the three main ways using long wheat straw, combed wheat reed and water reed. This encompasses preparation on the ground and how such obstacles as dormers and chimney-stacks are overcome, from eaves to ridge.

Chapter 6 analyses the results of an extensive survey of about half of the 700 surviving thatched roofs in Cambridgeshire, and endeavours to explain the distribution of the various types of thatch. It accounts for the survival of a significant quantity of thatching material from the late Middle Ages, and examines the life-expectancy of a long-wheat-straw roofs, which is demonstrated to be on average between 35 and 40 years. This result is compared with the expectancy for water reed, and also for wheat straw in other parts of the United Kingdom, concluding that the quality of thatching in Cambridgeshire, as well as its climate, are particularly favourable to longevity.

The Conclusion draws together these results and underlines the problems of a traditional building skill practised in what are more or less ancient ways in the current climate of conservation and economic prosperity based on the efficient use of material and human resources.

The thesis is supported by a catalogue raisonné of all the thatched roofs in twenty-five Cambridgeshire parishes (and three in neighbouring parishes), and by appendices, one of them giving the responses to a questionnaire sent to all the thatchers known to be working in Cambridgeshire.

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INTRODUCTION

This thesis is about thatching in Cambridgeshire. It originated in a project set up by English Heritage in the early 1990s to study thatch and thatching historically since the Middle Ages. The aim of studying thatching in Cambridgeshire was to provide a local study of the state of thatching today.

Although separate from the English Heritage project, this study has been informed by progress with the English Heritage project, which has now reached a conclusion with the publication of three volumes of studies (Letts 1999; Moir & Letts 1999; and Cox & Letts 2000). These cover respectively medieval thatching materials, thatching 1790-1940, and thatching 1940-94. Cox has also published a study of thatching in Devon (Cox & Thorp 2001). This study concentrates on thatching in Cambridgeshire in the twentieth century, and particularly in the period since the Second World War. It examines the principal materials used in thatching in Cambridgeshire during this period, precisely how they are laid, and how well they provide a lasting weatherproof roof.

The aim of the study is to examine thatch as part of the process of building, and therefore from the point of view of the builder. It takes note of the work of historians, archaeologists and archaeo-botanists, but their skills are separate from those employed in this thesis and use historical archives and archaeological and botanical scientific techniques that have not been learned as part of the research. Building techniques, however, have been learned and are put to full use in the following pages.

The analysis of the individual roofs, therefore, was carried out from the point of view of the master thatcher, and hence employs the skills that he would acquire during his working life, and draws on his experience of the raw thatching materials and their behaviour in the varying circumstances of weather, orientation, roof pitch, location and general environment. This experience combined with the human senses of sight and touch, add up to a powerful analytical tool that should not be underestimated for its ability to estimate the age of a thatched roof in a given location.

However, there are perhaps more scientific methods that might be employed such as radio-carbon dating that would establish age. Other methods are available that would help to analyse the various layers of thatch on a roof so as to establish which varieties of wheat and other cereals had been used. This could possibly throw light on, for instance, interesting historical factors. Unfortunately these processes were unavailable and are in any case quite costly. Neither a detailed scientific analysis nor a historical analysis is consequently part of this thesis.

Nevertheless the thesis starts with a brief account of the history and context of thatching in Britain and more specifically in Cambridgeshire. There follows a detailed discussion of the materials available within the county and the form of the roofs on which these have been and still are laid. The core of the thesis is a study of the thatchers, how they work and the methods they employ with the three materials commonly found in Cambridgeshire. This is then analysed for performance, both with regard to the materials and their use, and to such other factors as causes of deterioration and their uses for aesthetic effect.

Originally the word 'thatch' meant roof. The roofing materials most commonly used in early historic times were various kinds of vegetable matter such as straw, reed, heather, bracken and turf, rather than stone or fired clay tile. Tile came into widespread use later in the Middle Ages with the result that eventually the word 'thatch' became confined to vegetable roofing.

Although thatch is nothing like as common as it formerly was, it is still widespread in many parts of Britain. Thatched roofs are a prominent part of the landscape in the West Country from Hampshire to Cornwall, and similarly in several counties north of the river Thames as well as Cambridgeshire. Similarly thatch is found in many of the poorer parts of Wales and Scotland, and particularly the Western Islands and also the Isle of Man. The thesis establishes what types of thatching material are employed as weathering coats on the various roofs of Cambridgeshire, and are therefore immediately visible. (A weathering coat is the upper layer of thatch that protects the roof from the effects of the weather. For this and other definitions, see the Glossary at the end of the text.) The thesis also examines the underlying layers of thatch (namely the fleeking layer and the base layer), wherever possible, since these may be formed from other materials and occasionally are of some antiquity.

The relevant data for the various materials used as a weathering coat were initially gathered during the course of a survey carried out for English Heritage. The main purpose of this survey was to establish the number of thatched roofs still in existence within the boundaries of the old county of Cambridgeshire, excluding the Isle of Ely. (The old county of Huntingdon and the Soke of Peterborough, part of modern Cambridgeshire since 1974, are again not included.)

The first time a general survey of this kind had been undertaken was forty years ago when the former Ministry of Public Buildings and Works compiled statutory lists of buildings of special architectural and historic interest for the county. This by its nature gave little detail other than the existence of a thatched roof, and then only a small proportion of the total of thatched roofs. The county was resurveyed in the late 1970s and lists were published in 1980 and soon after. While this added most of the county's thatched buildings, the type of weathering coat was not described and no mention was made of base coats. The survey for this thesis, which was begun in 1993 and continued until 1996, found that Cambridgeshire's 101 parishes contain 785 thatched roofs.

Apart from establishing numbers, a further purpose of the survey was to examine the weathering coat of each thatched roof so as to establish which type of material was employed in each case and where it is to be found. The materials used for thatching in Cambridgeshire today are restricted to three clearly different types, namely long wheat straw, combed wheat reed and water reed. These are commonly found in many other regions of England where thatched roofs are prevalent, but are only the principal survivors of a much greater range of materials used historically. The distribution of these materials was then plotted on Ordnance Survey maps and the results tabulated so as to establish which of the three is the dominant material used in each of the individual parishes. The results of this initial survey are presented in map format. This identifies the dominant material for each individual parish by means of a colour code (Appendix A, Map 1).

This map highlighted some interesting results with regard to the distribution of the dominant materials throughout the county, but could not be used to provide a detailed picture of how these materials were employed or how their use had developed, if at all, during the twentieth century. To achieve these aims other methods were necessary, most particularly a survey of surviving photographic records held, for instance, in the county archives and by the National Monuments Record Collection.

Before a detailed survey of the county's thatched roofs could be carried out, and also a survey of the buildings they cover, the expertise for this operation had to be acquired so as to enable this to be successfully achieved. Published sources are limited in their understanding of thatch and, even more so, they lack details of the methodology employed in the thatching process. Another problem, which quickly revealed itself, was that most of the published authors were surveyors, historians or architects, with a very basic and faulty understanding of the methods employed in the craft of thatching. None of them, significantly, was a master thatcher. Their terminology also was vague with regard to certain processes, tools and materials. Much of this terminology as understood in Cambridgeshire is given in the Glossary at the end of the thesis. This reflects the methods used in the county, which can only really be understood by a master thatcher.

The process of analysing the various types of thatched roof in Cambridgeshire during the first stage of the fieldwork proved to be most enlightening and initiated a course of self-discovery. It soon appeared that the only way the relevant knowledge could be both acquired and analysed was to become apprenticed to a master thatcher and learn the craft from scratch. So this I did, and between 1992 and 1995 learned the principles of thatching from a master thatcher. He tutored me in the craft for nearly four years. This was essential to my research, giving me the basic knowledge to assess the individual buildings that I surveyed.

My master, typically of many Cambridgeshire thatchers, was my father. He was a fifth-generation thatcher, whose knowledge in turn had been passed on from his father, grandfather, great-grandfather and great-great-grandfather. He had started his working life at the age of 13, when his father was a small farmer who supplemented his income by thatching the houses and barns of the surrounding villages. Before this, my father's grandfather had tried to improve his living beyond that of his own father, who had remained a thatcher all his life, and subsidized his income from thatching by harvesting the fruit from his small orchard, which he would sell to the local grocers and fruit traders. My grandfather then built the farm up to a size where it could support his large family, but during the early years of its development life was very difficult and money was in short supply. He therefore supplemented the income of the farm by turning to his craft of thatching from time to time.

My grandfather knew few pleasures and possibly more than his fair share of hard work, hard as my father often recalled when reminiscing about life when he was a boy. One particular account springs to mind. He and his father were thatching a building on the outermost circumference of their travel for a day's work. Reaching the site of this building involved both of them rising at 5.00 am and starting to walk by 5.30 am the 9 miles or so to its location. After approximately a three-hour walk they would then start work, which my father assures me was hard and continuous throughout the day, with approximately 30 minutes break for lunch, until, at the end of the day, they would turn around and walk home. This continued for approximately six weeks until the roof was completed and the grand sum of £75.00 exchanged hands, a sum that covered both labour and materials. My father, however, thatched the very same roof in 1984, some forty-five years later, this time for £8400, and, again, the job took forty working days (see Appendix D). This time, significantly, he went by lorry, a marked improvement in the thatcher's lot, but, this time, he did not employ an assistant. My father began as a thatcher, but turned to general building when thatching failed to provide a living wage. However, the improvement in monetary reward, particularly when compared with wages in general building, prompted my father to return in 1973 to his former craft of thatching so that he could support his family, keep food on the table and a roof over our heads.

Success was never easily gained, nor easily maintained. This meant keeping the secrets of the craft just that, secret. When thatching a house at Barrington, a rival, who was thatching a building a few doors down the road, approached him. Being observed at work, my father deliberately laid the bundles of thatch the wrong way up on the roof whilst he continued a conversation with this fellow thatcher. When the conversation had ended and the rival had resumed work on his own roof, he stripped off the bundles that he had wrongly laid and replaced them correctly. When asked why he did this, his reply was short and to the point: 'he's not going to learn anything from me.'

These accounts and the skills of the craft cannot be gained from any book and I appreciate both of them. Indeed I have yet to find a book among the limited number available that describes the process of thatching in any one of the major materials at all accurately. This is an admitted gap in the three English Heritage volumes. Moreover the knowledge gained has been invaluable in carrying out the various assessments of age, type and condition of thatch during the basic survey of 376 dwellings in Cambridgeshire and the later examination of many historic photographs of thatched buildings.

While a very large number of these photographs of thatched buildings are available, both in the National Monuments Record maintained by English Heritage at Swindon and in the Cambridge County Archive, poor labelling makes it impossible to identify a very large proportion of them, thus reducing their value to this study. An unexpected result of examining them, nevertheless, was their graphic record of the abject poverty that rural Cambridgeshire endured in the first half of the twentieth century and beforehand, when many of the photographs were taken.

The training I received covered all of the aspects of thatching in the three major materials, long wheat straw, combed wheat reed and water reed, and also an investigation of how they are harvested, stored and prepared for use. This brought inestimable knowledge, which, combined with a great deal of observation of the individual processes and investigation into the history of various thatching techniques, has resulted in an accurate and detailed assessment of 376 individual thatched roofs in Cambridgeshire.

One important result of learning the craft of thatching from a master thatcher was that it became possible to describe analytically the various but allied processes of thatching in long wheat straw, combed wheat reed and water reed. This covers the preparation of the thatching materials, basic principles of thatching, and a detailed account of how to cover a roof from end to end and eaves to ridge, and how to thatch a roof around such obstacles as hips and valleys, dormer windows and chimney-stacks. All of this must be done carefully and accurately so as to ensure a sound weatherproof roof.

That done, the knowledge gained from training with a master thatcher was applied to the detailed survey of three separate zones within the boundaries of Cambridgeshire. Since there are too many thatched roofs in the county for a detailed analysis of each one to be feasible, the roofs of only twenty-four parishes were selected from the northern heath and fenlands, the south-eastern chalk downland, and the south-western pasture meadowland. These were selected with the aid of the initial survey and located in these distinctly different parts of the county so as to try to maximise variations in the results.

The results from these specific parishes were formatted in a similar way to those for the whole county. Firstly, a map shows the whole county with the dominant type of weathering coat indicated by means of an individual colour for each parish (seven parishes and the City of Cambridge have no colour since they have no thatched buildings). A second map of the county shows the twenty-four surveyed parishes with a pie chart for each one in which the three weathering coats are shown proportionally. Then there are individual maps for each of the parishes showing every individual thatched building plotted in a colour that indicates the type of weathering coat used for its roof. There is also a pie chart for each one of these parishes, augmenting the small county pie-chart map, which shows the type of weathering coat and its estimated age for each individual thatched building within the parish. Finally maps of the villages within the three areas of the more detailed study were produced locating the individual buildings with a coloured dot indicating one of the three thatching materials used, giving a closer focus to their distribution throughout a particular village (these are set out in the individual parish entries of the Catalogue Raisonné).

It became possible to identify the weathering coat of a thatched roof quite readily. In many cases it was also possible to determine the base coat by an examination beneath the eaves of the roofs. Moreover, because the resulting expertise developed during the survey caught the interest of numerous house owners and occupiers, it made entry fairly easy and consequently allowed a more detailed examination of the underlying fleeking and base layers. So part of the survey of the individual roof structures, where house owners would permit it, took the form of examining the roof void from beneath. It was therefore possible to determine the material used for the lower layers in the majority of these cases, and also to examine the structure of the timber roof and how the thatch was fixed to it.

This revealed some interesting results, most excitingly thatch whose underside had been blackened by soot deposited by the smoke from an open hearth below, clear evidence for the former existence of a medieval open hall. Finally, the examination of this space sometimes revealed changes in the construction of a roof, mostly resulting from extensions and alterations that had occurred over a long period of time. This therefore allowed various secondary conclusions to be drawn about the phases of construction of the roof structure and the likely dating of the various layers of thatch.

The information gleaned for each individual building was set out systematically, parish by parish, and compiled in the form of a Catalogue Raisonné.

The discovery of various obsolete and sometimes extinct raw materials used for thatching has implications for the history of their cultivation and the harvesting processes that were employed in their day. These are not analysed, since they belong to agricultural history. However, as it turned out, this discovery, together with that of smoke-blackened thatch, also has implications for the dating of the buildings in which these ancient materials were found. So, while the implications for agricultural history are not part of this thesis, the implications for architectural history have been briefly explained.

Once alerted to the possibility of finding smoke-blackened thatch, I began an extensive search in Cambridgeshire. This began with the statutory lists, which, it quickly appeared, make no mention of smoke-blackened thatch at all, since no one knew of its existence when the lists were compiled. Likewise, there is no mention of smoke-blackened thatch in the two volumes of inventories of the Royal Commission on Ancient Monuments for England (RCHME), which describe west and north-east Cambridgeshire respectively (RCHME 1968 and 1972). While the RCHME investigators found and surveyed a few medieval houses, they did not mention smoke-blackened thatch, once again because it had yet to be recognized when they were at work in the 1960s. Once it had been recognized, the possible survival of smoke-blackened thatch enthused several local people and some conservation departments of the county and district councils. They pointed me in the direction of a number of thatched houses which they thought might possibly be medieval in origin, but there was an equal disbelief that late medieval thatch had survived anywhere in the county under any circumstances. I visited numerous addresses only to discover that many roofs that had possibly contained smoke-blackened thatch had been entirely stripped and re-thatched in long wheat straw or water reed within the last five to ten years. It is likely that many counties in England have actually lost their last surviving examples of smoke-blackened thatch in this way.

Nevertheless I was undertaking the detailed survey of as many thatched houses as I could gain entry to in twenty-four selected parishes. There were many difficulties involved when investigating them for the survival of smoke-blackened thatch that I did not anticipate when my research of thatched roofs first began. Some buildings that I suspected of containing smoke-blackened thatch had no access to the roof space and access was extremely limited in many others. The roof joists of many of these buildings were structurally unsound, which made examination extremely difficult, and this was compounded by a lack of space and light. Nevertheless, persistence was rewarded and the search proved fruitful. Seven cases of smoke-blackening came to light. This prompted a search outside the selected parishes for yet more likely thatched houses, and, once again, I discovered more examples, eventually twelve of them, making nineteen in all. A few of these examples are included in John Letts's volume in the English Heritage series (Letts 1999, Appendix 1).

While hunting for smoke-blackened thatch and studying how the thatching material was fixed to a roof, it increasingly seemed to be important to discover whether or not the processes of fixing had changed over the centuries and to what extent. I consequently sent all of the twenty-six master thatchers working in the Cambridgeshire area a questionnaire that posed a series of detailed questions about their training, practice and general methods of work.

From the twenty-six questionnaires sent out, seventeen replies were returned. The data gathered from these give evidence of the following aspects of the thatchers' working operations and experience: the method and location of his training; the number of years he had been practising the craft of thatching; the principal thatching material he uses; the size of his particular organisation; the sources of his raw thatching material; his average working radius; changes that have occurred during his working life to the quality of the thatching materials; changes, similarly, in the methodology of thatching; and, finally, the type of people who now own the thatched buildings he works on. The returned questionnaires are set out in Appendix B. This also presents the data in a series of graphs, giving a pictorial representation of the information at a glance. The graphs show the relationships of the number of years of experience against the number of thatchers, and the working radius to the number of thatchers prepared to travel a particular distance.

A second questionnaire followed the first one in which Cambridgeshire's thatchers were asked to comment on some of the findings, particularly those relating to the longevity of wheat straw and wheat and water reed thatch, and the causes of its deterioration. This second questionnaire was very disappointing, since only three thatchers replied. It is likely that the remainder disliked the idea of making comments on what might be seen as the quality of their own work and the secrets of their success, and so failed to respond.

This information was then examined in parallel with the data on thatching materials as a whole. The two combined gave a fuller picture of the thatchers' working methods and the materials used throughout Cambridgeshire. The historical and methodological developments of the twentieth century gleaned from the responses were set within the wider picture of changes since the late medieval period up to the present day. This reveals the various influences that have sparked change within the craft of thatching, whether they are a change in the thatching material or a particular advancement in a thatching technique.

The evidence of my father's and grandfather's practice made it possible to examine a number of roofs that had been thatched a specific number of years prior to the survey, and therefore to build up a comprehensive picture of the tell-tale signs of wear and tear. This was supplemented by further evidence gleaned from other craftsmen, with the result that it was possible to estimate the age of every roof inspected during the survey, or at least to estimate what proportion of its lifespan had already passed at the time of the survey (1993). It was also possible to some extent to judge not only the materials used as weathering coats but also the likely age of the roofs recorded in the photographic archives that were examined during the research. This evidence was set out in diagrammatic form, with the result that it has been possible to suggest the likely longevity of roofs thatched in long wheat straw with a fair degree of accuracy. The likely lifespan of roofs thatched in combed wheat reed and in water reed is not so clearly understood. Combed wheat reed is a rarity in Cambridgeshire, and its lifespan only known through hearsay. Water reed, though much more common than combed what reed, has a less readily interpretable record than long wheat straw, and its lifespan is again very much a matter of hearsay.

The likely causes of longevity and decay in thatch are set out and examined in the light of the replies from the questionnaire, and also analysed in the context of the results that the English Heritage series has published from other counties (Cox & Letts 2000).

Because the craft of thatching is both ancient and traditional it has its own language. This describes methods and the tools of the trade. Consequently the thesis includes a Glossary of Terms, which acts as a reinforcement of the explanations given in the body of the text.

For similar reasons the Bibliography is comparatively brief. As explained above, for all its picturesque qualities, thatching has not attracted an extensive bibliography, and this is reflected in the small number of publications and other documentary sources quoted in the thesis.

Chapter 1 - HISTORY

A brief history of thatch and thatching opens this study so that the circumstances in which roofs are thatched in Cambridgeshire today may be set in the context of how roofs have been thatched in the past. This will deal briefly with thatching before the twentieth century, and demonstrate how much and how little both materials and methods have changed since the Middle Ages. It will then set the scene for the state of thatching in Cambridgeshire.

Part 1: Thatched buildings

Thatching is one of the oldest of the surviving building crafts practised in the British Isles today, and certainly the oldest for roofing. Unlike masonry, which may be equally old, few examples of the craft have survived from the distant past. This is not surprising: the materials used in thatching quickly degrade and leave little archaeological trace. Alec Clifton-Taylor believed that 'scarcely any surviving thatch is as much as a hundred years old' (Clifton-Taylor 1972, 336). This is generally true, but, as will be discussed below, a significant amount of thatch does in fact survive from previous centuries, and even from the late Middle Ages.

The mason's craft is so old that its prehistoric origin is obscure. Countless ancient monuments constructed in stone survive to demonstrate this. Some of these may have been roofed with stone tiles, but most of them were probably thatched. Archaeological evidence implies that vegetable thatch provided the roofing material of the earliest prehistoric houses and also the majority of all but perhaps the most important buildings until the Roman period. Roman Britain made use of fired clay tiles, but these vanished in the difficult times following the collapse of Roman rule and were not to be in common use again until the thirteenth century (Clifton-Taylor 1972, 265 and 337).

For most of the prehistoric period and much of the earlier Middle Ages thatch in one form or another had no rival as a roofing material. Many modern English terms associated with thatching and agriculture reflect this, starting with the word 'thatch' itself. According to the *Oxford English Dictionary* the Anglo-Saxons used the Old English term 'thaec' for any kind of roof covering, whatever its material, and the act of applying it was 'theccan'. The Old German word from which these are derived has also produced the modern German word '*Dach*', meaning a roof. Thatch and roof were one and the same simply because, in the millennium following the collapse of Roman Britain when the English language was formed, any form of roof other than a thatched one was so rare as to be discountable. When other forms did become widely available, a roof thatched in straw remained so commonplace for so long that it took over the word, leaving other words for other roofs. Nevertheless the old terminology lingers. For instance the Norse invasion of Yorkshire gave the county the old Danish variation thack, and this is still a current dialect term for roof or roof covering, regardless of what material forms the covering (Clifton-Taylor 1972, 336).

Only turfs or sods seem to have been commonly used as well as straw thatch, and these were sometimes combined with thatch, as they still are in parts of Scotland and the Isle of Man. Wild vegetation, such as reeds, rushes, broom, heather, fern and bracken, may have been in use for thatching before the advent of cultivated barley, wheat and rye brought alternatives, and certainly were later. These cultivated crops provided an improvement because their straw was more easily worked, being of a regular size and shape, and more effective, because it could be more compacted and therefore produce a better weatherproof covering. All of these thatching materials had the advantage over stone tile of being available in suitable quantities to cover a roof wherever arable crops were cultivated, and that meant practically every part of the countryside with a significant population. Moreover the straw was ready for use and close to the site.

Today, these circumstances no longer prevail. Well before the end of the Middle Ages tiles of fired clay or stone had not only taken the place of thatch for roofing the most expensive buildings, but also were being used for houses and agricultural buildings of a lesser sort in many regions of Britain. Much more recently, proximity to sources of supply ceased to be relevant. Until the nineteenth century the cost of transportation was prohibitive in most circumstances for ordinary buildings. Now it is so low that alternative roofing materials, such as slate or tile, can be brought from a great distance, even from abroad if need be. Even superior thatching materials can be and indeed are brought from a long distance to renew a roof.

Thatched roofs today are almost without exception covered with one of three materials, namely long wheat straw, combed wheat reed and water reed. Wheat straw, historically, appears to have become increasingly important as a thatching material during the Middle Ages and thereafter, reaching a peak of popularity early in the twentieth century, when, according to John Letts (1999, Fig. 5), it accounted for the covering of seventy percent of thatched roofs.

The marsh reed of coastal areas is the most durable and highly prized of thatching materials. Its use nevertheless declined from about twenty percent in the early Middle Ages to about ten percent in the nineteenth century. It then made a rapid recovery and may now account for over half of English thatched roofs. The medieval and post-medieval decline in the use of reed may be linked to the increase of drainage in many localities which caused water reed to be either unavailable in sufficient quantity, or, because of transportation costs, prohibitively expensive. A very large amount of material is needed to cover a roof of any size, and the available reed taken from local wetlands in any one year is unlikely to have played a significant part in thatching. Moreover, Letts believes (1999, 5-6) that, although reed was highly prized for its durable qualities, it was probably seldom used more than five miles from a substantial reed bed because of difficulties in transportation. The evidence from Cambridgeshire, however, suggests that water reed, which grew in abundance in the north of the county, could be readily transported a good distance further (see Chapter 6).

Because of its durability water reed has been transported up to a hundred miles during the twentieth century, as railways and, in particular, steadily improving motor lorries and roads have reduced the cost of transportation. Reed is often imported from abroad because superior quality and low cost make it preferable to local materials, which, in the 1970s, suffered from poor harvests and difficult supply. Yet, despite the availability of wheat straw and the superiority of reed as thatching materials, even heather still survives in parts of the British Isles, though its use is now confined mainly to summer-houses, pavilions and other buildings which are designed to have a particularly rustic appearance. What once was a matter of necessity is now a matter of aesthetics. This is generally true of the survival of all kinds of thatch nearly everywhere in Britain today.

The craft of thatching as practised today was almost certainly established well before the Norman Conquest and may be of much greater antiquity. Archaeology has provided little definitive data concerning the prehistory of thatching in England. Neolithic and Bronze Age domestic structures are occasionally encountered in excavations, and, when they are, an analysis of their likely structure through an interpretation of their post-holes and other evidence, such as the lack of tile or slate fragments, suggests that their roofs were thatched (Letts 1999, 3-8).

Most of the early documentary references to thatching post-date the Norman Conquest and are easily misinterpreted, but the records are clear about the ubiquity of thatch. Thatch was equally common in towns, and clearly resulted in frequent devastating fires. Authorities attempted to ban the use of thatch in town, or at least to reduce its inflammability by demanding that roofs be coated with mud or lime (Salzman 1967, 223; Clifton-Taylor 1972, 336; Moir & Letts 1999, 9-12). This proscription was enforced with variable success throughout the later Middle Ages, but thatch remained an important roofing material in both urban and rural areas because of its low cost, availability and effectiveness. Nevertheless, because of the risk of fire, the proscription against it did eventually become effective (Clifton-Taylor 1972, 336). In Cambridgeshire there are no thatched roofs in the City of Cambridge today, thatch now being entirely a rural roofing material, both in the county and generally in England.

Many churches were once thatched, as the nave of All Saints' Church at Rampton in Cambridgeshire still is. Well before the end of the Middle Ages this was a rarity in most counties, and thatching was no longer common on buildings of status. Although most peasant and yeoman buildings were still generally thatched, in some rich counties, such as Kent, tile-making became widespread in the thirteenth century (Quiney 1993, 105-7), and, as a result, thatch slowly gave way as rich yeomen turned to the newer roofing material. As the proscription against thatch in most towns became effective (Clifton-Taylor 1972, 336), thatching became a country craft and increasingly associated with smaller and poorer rural buildings.

Fired clay tile was a relatively common roofing material for the best of Cambridgeshire's buildings well before the end of the Middle Ages, but it was only effectively changing the appearance of the county's villages at the end of the seventeenth century (RCHME 1968, xlix), and slate only made an appearance with the railways in the second half of the nineteenth century. While thatch on buildings with well-built roofs was often replaced with higher-status stone, slate, or clay tiles, depending on availability, less robust roofs continued to be 'spar-coated' (see Glossary) with a layer of fresh thatch over the existing base layer when the external coat showed signs of wear. Although a few large medieval houses remain in Cambridgeshire, many of its medieval houses are small (RCHME 1968, xlvi-xlviii; RCHME 1972, xlv), and sometimes very small as can be seen in the village of Foxton (Parker 1975), where their occupants - small-holding farmers or husbandmen - were so poor in the sixteenth and seventeenth centuries that they could only afford to thatch them. The homes of poor cottagers were even smaller version of these, and they too were invariably thatched. Apart from their poverty enforcing this choice of roof covering, the insubstantial and irregular construction of the roof framing made any other choice of covering all but impossible. Finally, there was an endless array of ancillary buildings attached to farms and the houses of husbandmen that needed to be roofed, and these were readily thatched in straw over some sort of insubstantial framing.

The improvements in building among the better-off farming continuity continued into the eighteenth century, despite a creeping agricultural depression that lasted until the outbreak of the French wars in the 1790s. Yet, while thatch was in general decline, it was still the most widespread form of roofing in Britain and a sign of deepening rural poverty and attendant poor housing. Nevertheless the thatched cottage suddenly found new admirers. It possessed many of the qualities of the picturesque admired by connoisseurs in the later part of the eighteenth century, and began to make its appearance in the work of popular artists like Francis Wheatley (1747-1801), George Morland (1763-1804), and, later, Sir David Wilkie (1785-1841), William Mulready (1786-1863) and a host of lesser topographers and narrative painters (Rural Development Commission 1988). Already in about 1772 Queen Charlotte had built a thatched cottage in what became Kew Gardens. In France Marie-Antoinette's Petit Hameau in the garden of the Petit Trianon at Versailles placed the art of the thatcher on an even more elevated plane of fashion, and identified the thatched cottage with the new Romantic cult of nature. By the turn of the century the thatched cottage ornée had become an important feature of the English country estate (Quiney 1991, 210-15). In 1811, the first year of the Regency, the famous thatched hamlet on the Blaise Castle estate near Bristol was built to the design of John Nash for J.S. Harford, the Quaker banker (Mansbridge 1991, 170-2). Thatch was back in business.

The adoption of thatch by the wealthy as a picturesque adornment to a grand estate marks a new phase in its history. This started at a time when thatch ceased to be the cheapest (and very often the only) available form of roofing for the greater part of the population, and is attributable to the romantic nostalgia of people who had no real experience of it. Even so, commercial production of Welsh and Cornish slate on a huge scale had begun by 1820 and the canal and rail networks soon made this and other roofing materials freely available in places where thatching had long been established, thus compounding its decline (Clifton-Taylor 1972, 163-73). Moreover the French wars had raised the price of wheat and wheat straw to prohibitive levels. Even straw waste was vital for cattle fodder and litter and, according to stern agricultural economists, wasted on a thatched roof. Where practicality counted for more than taste thatch was decidedly at a disadvantage. Moreover, some people of taste soon grew weary of thatch as its bright yellow turned to dull grey with age. An anti-thatching lobby evolved that sniped it for the decay of its colouring, its wastage of precious resources, and, finally, its ability to harbour vermin (Airs 1998, 58).

It is possible that thatch suffered its period of greatest decline in these early years of the nineteenth century (Letts 1999, 7), while the housing boom later in the century, attendant on the unprecedented rise in population, slowed down this decline but never halted it. Other studies put the decline in thatch very much later. One estimate suggests that there may have been 200,000 thatched houses in 1800, together with 750,000 other thatched buildings such as barns, cow-houses, and assorted outbuildings. These numbers had changed only a little by 1862-3, when there were an estimated 300,000 thatched houses and 525,000 other thatched buildings. The real decline came during the next hundred years, so that by the 1960s there were perhaps only about 25,000 thatched buildings in England, nearly all of them houses (Moir & Letts 1999, Fig. 1).

For the record, the estimates for Cambridgeshire suggest that there were 16,451 thatched dwellings in 1800, and as many as 39,003 in 1862-3. This demonstrative increase was typical of the poor agricultural counties of southern England where industry had done little to spread wealth, even on the smallest scale, among the labouring classes. At the same time the number of agricultural labourers increased up until the great Victorian depression hit the farming world in the 1870s (Moir & Letts 1999, 13-15; 18-21). These people occupied the poorest of cottages, the remnants of several of them still being evident today, despite extensions and improvements to them. This was probably the cause of the increase in the numbers of thatched dwellings.

Almost certainly the main decline in the thatched dwellings of southern counties occurred late in the nineteenth century and during the first half of the twentieth century. It probably began with the agricultural depression that was initiated by failed harvests in the 1870s and the first imports of cheap American grain. This prompted the drift from the land in rural counties such as Cambridgeshire, and gathered its greatest momentum between the two world wars, because of the introduction of machinery. Machine reaping, with its damaging effect on wheat straw, was first introduced in the late nineteenth century. Mechanical harvesting and threshing of grain certainly took its toll, particularly in Cambridgeshire between the two world wars and the decade or so afterwards, making wheat straw all but useless for thatching as well as reducing the need for labour, and hence poor housing.

This change had been initiated by the introduction of new varieties of grain, as well as by machinery for harvesting and threshing. It had been prompted by the high wages paid to labourers in some areas, particularly those affected by industrialisation, but elsewhere there were no such pressures and change was slow. The agricultural depression of the later nineteenth century began to alter the pattern, but did not particularly increase the pace of industrialisation in agriculture since investment in agriculture had little appeal. It was consequently the period between the two world wars that saw the most marked spread of industrialisation to agriculture, machinery effectively taking over from manpower as a result of the wastage caused by the heavy casualties during the Great War. Harvesting machinery was particularly detrimental to the production of raw materials for the craft of thatching, thus making good thatching straw difficult to obtain easily.

The first process in the production of grain to be mechanised was threshing. Sheaves of corn were originally taken to a floor and flailed by hand to remove the grain from the straw. This was generally achieved without damaging the straw stem so that it could be readily used for thatching. This process was mechanised by the introduction of the threshing drum, which became a standard feature of some parts of the English countryside in the mid nineteenth century (Fussell 1952, 152). This crushed the straw, making it useless for thatching. Nevertheless a portion of the crop required for thatching could still be set aside and threshed by hand. This, however, raised the price of hand-threshed straw, much to the detriment of the economics of thatching. Thatchers consequently responded to the abundance and lower cost of machine-threshed straw by modifying their technique so as to enable them to use it. This response alleviated but did not remove the disadvantages under which they worked. Although hand-flailing continued until even after the Second World War, the mobile threshing machine combined with a steam traction engine was commonly at work before the end of the nineteenth century. The replacement of a steam engine by an internal combustion engine only speeded up the process, and this was linked to the introduction of machine reaping. Reapers, at least, were not notably damaging, but both these and threshing machines were overtaken by the widespread introduction of combined harvesters in the 1950s. The straw from these could not be used for thatching at all (Moir and Letts 1999, 72-3).

There were, however, some innovations that, by improving the quality of thatching material, helped the craft to survive in the face of every kind of competition. The first of these was the introduction of devices for combing wheat straw so as to produce clean, straight stems known as wheat reed (John Fitzherbert's *Book of Husbandry* calls wheat 'rede' as early as 1534). The use of an iron-toothed comb (see Ill. 1) for this purpose is recorded as early as 1807 in Somerset and since that time combed wheat or wheat reed has been widely used in Devon and other southern counties.

Two styles of thatching seem to have emerged, according to what most thatchers believe. One employed this newly produced combed wheat reed. This is undamaged, full-length, wheat straw, which is prepared with its butt ends adjoining, and the flag removed from the stems by a process of combing, hence the name. The main purpose of this method was to emulate a roof of water reed, which would have been considerably more expensive, as indeed it is today. The other employed long wheat straw that has been damaged by the threshing process, and has its ears and butts mixed together. A roof thatched in long wheat straw both looks cheaper and is cheaper.

Most British thatchers, according to popular belief, were soon able to use both of these two methods of thatching, even when they lacked the ability to use others. A possible reason for this is that the origin of these two methods almost certainly lies in the mediaeval craft of thatching. Despite combed wheat reed being the product of machine threshing and combing, a method of medieval threshing in which sheaves were lashed over a barrel produced a very similar effect (Letts 1999, 25). A similar product to long wheat straw in medieval times came about through a second cut, in which straw, weeds and other waste were an integral part (Letts 1999, 24-7). Two different methods of thatching were developed for these materials, and, however diverse, were probably modified for the new products of machine threshing and combing.

Developments in agriculture and botany were another cause of decline in the use of straw for thatching in England. The various cultivating and harvesting processes employed during the

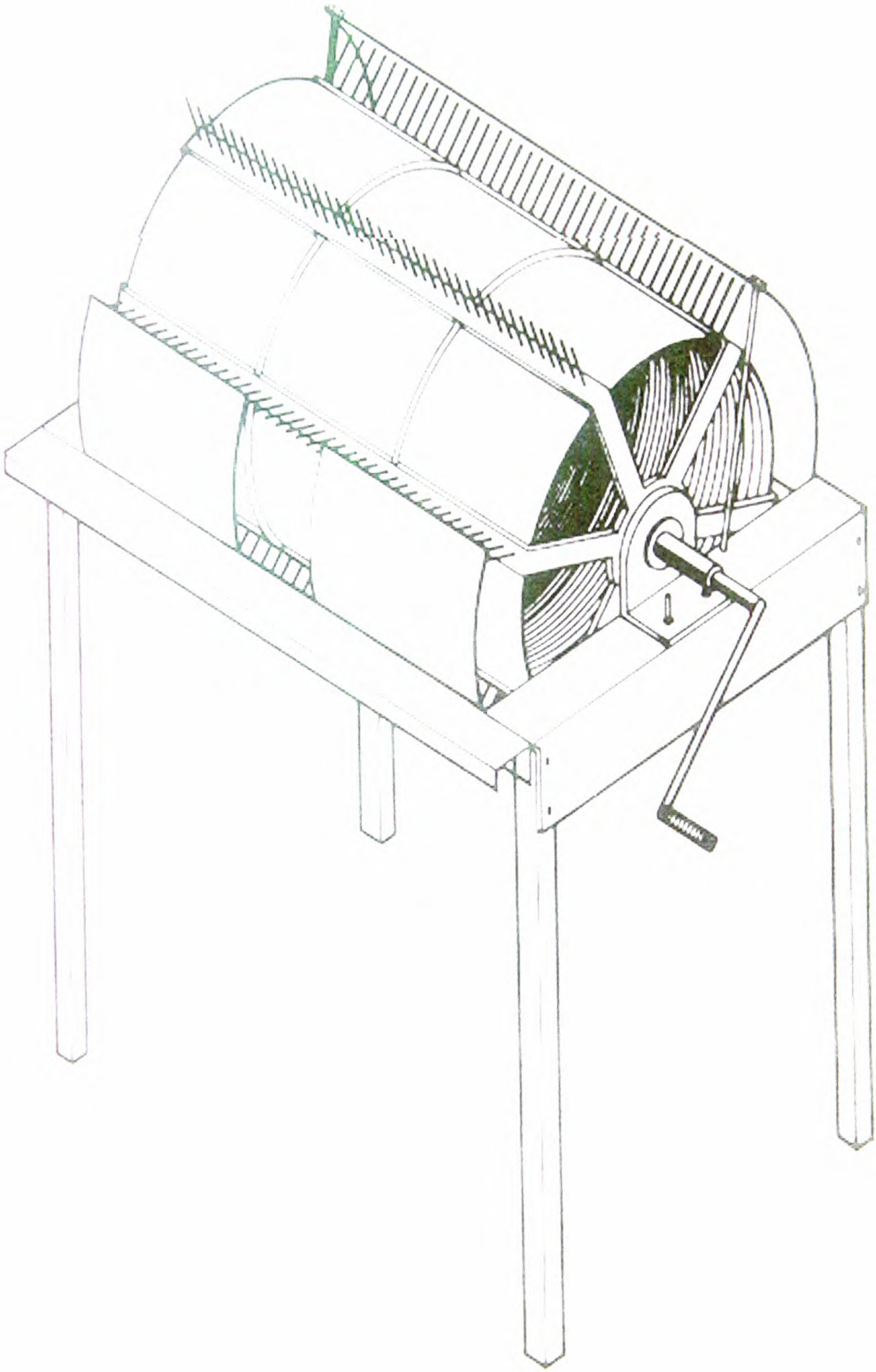


Illustration 1 – Combing drum, showing rows of iron teeth.

Middle Ages for the crops that provided the thatching materials of the day eventually became extinct. Improved agriculture and the employment of harvesting machinery forced old strains of grain that had been used for thatching out of cultivation to be replaced by newly developed ones that improved yields.

The various species of barley, rye and wheat cultivated in the Middle Ages were significantly different from the newly introduced species, which were genetically selected to withstand their environment by reducing the height of their stem as well as to produce a larger yield. Despite the agricultural benefits of these new species, other physical characteristics made them less and less suitable for the needs of thatching.

Perhaps as early as 1868 plant breeders were developing shorter wheat varieties with stiffer straw that were particularly chosen to prevent the new, high-yielding plants from 'lodging' (or falling over) in wet and windy weather (Bingham *et al.* 1991; Bell 1987). As a result the tall-stemmed, disease-resistant, but low-yielding land races of English bread and rivet wheat had all but disappeared from cultivation by the end of the nineteenth century. This process of 'improvement' culminated after the Second World War with the creation of the dwarf wheats, often less than 600 mm (2 ft) tall, that now dominate bread wheat production in Britain. These produce a straw that is of little or no use to the thatcher (Cox and Letts 2000, 17-25).

At the same time the widespread adoption of the combine harvester has made it necessary for the thatcher to look round more urgently for other materials. The finest of these is the aquatic reed *Phragmites australis* (and now the also the almost identical variety imported from the Continent *Phragmites communis*), which has been in use since prehistoric times. It is traditionally associated with the Fens and the Norfolk Broads, and grows wild in sea marshes and by rivers.

At the same time, modern requirements for traditional lengths of straw for thatching have led a small minority of the farming community to grow the old varieties of wheat that produce a greater length in the stem than modern strains do (Letts 1999, 8). The harvesting process of these traditional varieties must follow traditional methods if the straw is to be usable. So, a reaper first cuts the crop, then a binder binds it into bundles (see Ill. 2), which are then stooked in the field to dry before threshing. This is carried out by a threshing drum, which ensures that the straw is not unduly crushed. In effect the whole of this harvesting process became obsolete fifty years ago, but the mechanisation introduced by the reaper, binder and threshing drum, are the furthest advance developed so far that will achieve the required quality of straw for thatching.

The disadvantage of this harvesting method is the amount of labour required to operate it, making the crop more expensive to produce and to harvest. This factor alone limits the number of producers growing the older varieties of wheat for the thatching industry, even though the producer can earn money from the sale of the grain, as well as the straw.

Few of the improvements in yield, grain quality and disease resistance of cereal crops over the past fifty years have benefited the thatcher. While the acreage planted specifically for thatching straw has fallen drastically in recent years, the use of nitrate fertilisers and fungicides has resulted in seriously deficient straw quality. The spread of these chemicals is not limited to crops grown for grain and has affected crops grown for thatching straw as well, consequently triggering an epidemic of premature decay on thatched roofs that is seriously undermining consumer confidence in thatching.

As a means of countering this, and also because thatching straw is difficult to obtain in arable areas where grain produces a better profit, many thatchers and at least half of those working in Cambridgeshire, have taken to acquiring their own land and growing their own straw in a manner to suit their own particular style of thatching technique. Not only do they grow enough for their own use, but many of them also produce a surplus to sell on to other local thatchers.

These thatchers do not use chemicals, but, because of the heavy use of chemicals in the past, residues remain and will continue to do so for some years to come. The quality of straw is improving, but still has some way to go. Unless the quality of the straw available improves

Illustration 2 – Reaper operated by Courtney Elliott, shown sitting on the machine with his son Peter in the foreground (copyright Royston Crow) significantly in this way over the next ten years, confidence may be fatally eroded and straw thatching will not survive as a roofing material in England, irrespective of planning legislation or the skill of the thatcher.

Transportation was difficult for bulky materials before the Great War, mainly because of poor road surfaces, many of them in rural areas being no better than dirt tracks. The railway system, for all its extent, mainly served towns, thus leaving many small villages in total isolation. Because the skill of thatching was commonplace amongst the labouring classes and harvests produced the raw materials, it was relatively easy for the poorer members of rural society to thatch their homes themselves.

After the Great War all this changed. Because of the carnage, there was a great loss of men possessing thatching skills, as there also was with many other trades associated with the poorer end of society. To counterbalance this, there was an influx of other roofing materials, for instance slate, which, though heavy, is far less bulky than thatching straw, and was readily moved around the country by boat and train, lorries completing the journey along much improved rural roads. Corrugated iron, developed during the nineteenth century as a cladding material for the walls of cheap or temporary structures, was brought into play, either by replacing thatch altogether or by covering over a thatched roof that had seen better days (Moir & Letts 1999, Fig. 17; Cox & Letts 2000, Fig. 19).

This was a gradual process, but it reduced the number of skilled master thatchers until they had dwindled to a few, who continued their craft as best they could, together with the tradition of passing on their knowledge from father to son. Moreover the general ability of the agricultural labourer to thatch a roof or a rick was soon lost when it became easier to store grain in Dutch barns. Thatch, once the most popular roofing material, was by the 1920s increasingly viewed as a liability.

The association of thatch with poverty, both real and imagined, caused local authorities to distrust thatched dwellings on the grounds that they were probably slums. An official desire for improved housing from 1919 onwards prompted slum clearance, and that often meant a clearance of thatch as well. By the 1930s some observers of the rural scene believed that thatch was in terminal decline and would soon become a thing of the past (Moir & Letts 1999, 3, 21-3).

Even a thatched roof on the poorest house was no longer safe. Often when a roughly thatched roof was coming to the end of its life, rather than re-thatch it, or at least patch it, many owners or tenants turned to corrugated iron and covered over the thatch, thus embalming it beneath. This began before the Second World War, but became increasingly common afterwards. Numerous military Nissen huts and other buildings that were clad in corrugated iron (in fact thin steel plate that was galvanised and corrugated) became redundant and these were a ready source of material waiting to be robbed. Numerous houses in Cambridgeshire had their thatched roofs embalmed in this way for several decades. In Melbourn, for instance, No 96 (Tollgate Cottage) High Street (Mb 21) and Nos 127, 129 & 131 High Street (Mb 33) were roofed for a while with corrugated iron, and have since reverted to thatch.

The association of thatch with poverty is now a thing of the past. Paradoxically the improvements in transportation that nearly killed off thatched roofs have played a key part both in reawakening a popular desire to own a thatched roof and in re-establishing the craft of thatching. The motorcar has allowed many people employed in white-collar occupations in towns to live in the surrounding villages, which have become part of new commuter belts. These newcomers see a thatched roof today rather more favourably than the old villagers, if only as part of Britain's rural heritage. The desire to own thatched properties has increased with their rarity, and newcomers to rural society seek these out. But thatch is only available to those owners who can afford to re-thatch a roof every 20-30 years, at a present cost of £12,000 or more. This and the greatly increased prices of rural houses mean that the original populace which had grown up and worked within these villages can no longer afford to buy a dwelling there and are forced to move to the towns.

The thatched roof has also gained official recognition. Even while thatched dwellings were being condemned as slums, they were starting to be statutorily listed for their special architectural or historic interest. The Town and Country Planning Act of 1947 set up the procedures for listing, and many thatched buildings were consequently listed following the first surveys. The 1967 Civic Amenities Act and 1968 Town and Country Planning Act set up Conservation Areas and improved the effectiveness of legislation in protecting the greatly increased numbers of listed buildings that had come about through a more liberal attitude to what was of special architectural or historic interest. The result today is that most thatched buildings are listed, and this protection has more or less halted the decline in the number of thatched buildings. Moreover, listing has given legal support to a general recognition among both owners and the public at large of the value of a thatched roof. So far, it has been less successful in protecting ancient forms of thatch, largely because these have not been recognised and are not therefore included in the listing descriptions. None of Cambridgeshire's local authorities had agreed a consistent preservation policy when questioned on the topic either.

While the survival of ancient thatch on the roofs of historic buildings has occasionally been recognised by planners and historic building experts, the legislation that is available to protect it has rarely been invoked. Within the last few years, however, planning officers in various county councils have developed guidelines restricting the use of certain materials and styles of thatching in order to preserve the 'traditional' appearance of roofs in their jurisdictions. A roof thatched in long wheat straw should be re-thatched in long wheat straw, and many conservation officers insist on this in the face of the superior lasting qualities of water reed.

Not all of them, however, do so, nor are they always successful. The evidence for the erosion of 'long straw' thatching in Northamptonshire during the 1980s is overwhelming (Kerrou 1991), and the unregulated stripping of ancient thatch has been a catastrophic loss to archaeo-botanical studies and to anyone interested in the history of thatching in the county. The restrictions that have now been imposed by conservation officers aware of this problem have dramatically curtailed this loss. But they have also provoked opposition from thatchers who have struggled to keep their craft alive under rapidly changing economic conditions, for instance by adopting new materials and techniques with an individuality that has probably always characterised their craft. While thatchers are usually the first to recognise the significance of the ancient thatch they encounter during repair or re-thatching, they ironically also see themselves as having no choice but to replace an old material with a new one in order to exercise their craft successfully in an increasingly competitive market.

So they are inclined towards switching to longer-lasting, imported water reed, or adopting more efficient methods and styles of application in a shrinking market. The recent introduction of veldt grass from the savannahs of South Africa may aggravate this problem further, although the first evidence of this new material on the English scene suggests that its initial cheapness is a false economy given its likely poor lasting qualities in England's wet climate (see below). Despite the pressure on thatchers, it is essential to protect the ancient thatched roofs that have survived, for they are time capsules of inestimable value to botanists, building experts, thatchers and thatch historians alike.

Simultaneously the thatcher's status has changed. He is no longer an unskilled labourer working on the land for part of the year and subsidising his meagre earnings by thatching his neighbour's house to keep the wolf from the door. Today he is respected as a highly skilled master craftsman, and paid accordingly. By 1990 a master thatcher might expect a turnover of £30,000 per annum, of which a third would be taken by costs, and the remainder, £20,000, would be gross profit (pers. comm. D.D. Stanford).

Despite the thatchers' enhanced status, the craft of thatching has altered relatively little, as indeed have many of the traditional building crafts. This is largely a consequence of the thatcher's training. Up until the middle of the twentieth century the craft of thatching was learned on the job from an experienced thatcher. Training, as in most building skills, was informal. Many thatchers were taught by their fathers or uncles, and in many of these cases family interest ensured a full and sound training. Many regions, Cambridgeshire among them, were dominated by one or two families of thatchers, comprising brothers and cousins, and extending over several generations. This training was, by its nature, only as good or as bad as the teacher, but a dedicated and apt pupil could make up deficiencies. It was not open to radical departures. A strict adherence to precedent was the order of the day, and discipline in this harsh trade could border on the violent (pers. comm. D.D. Stanford).

There are now alternative means of training, but these have not caused any kind of radical change. By the 1940s, when thatching seemed to have gone into terminal decline, the craft and its teaching were equally threatened. After the Second World War the Rural Industries Bureau endeavoured to halt this decline. The Bureau had been set up in 1921 as a government measure to promote agriculture and its associated industries in a time of acute depression. Although the Bureau recognised the threat to thatching, the closed community of thatchers was unwilling to countenance what it saw as outside interference. Only after the Second World War did the Bureau endeavour to promote thatching by setting up training courses. In 1945 the shortage of thatchers had become acute, particularly in Oxfordshire and Cambridgeshire. The Bureau appointed an instructor, who worked in Oxfordshire and neighbouring counties, in the hopes that the country might be similarly served. Counties should appoint thatching officers who would grade the existing thatchers according to their skill and identify those who were willing to take apprentices. This scheme foundered, again perhaps because it failed to overcome what thatchers perceived as government control (Cox & Letts 2000, 30-33).

Nevertheless a number of instructors went out into the field. In 1959-60, three instructors made 250 instructional visits between them. At the same time the Bureau pressed experienced thatchers to take on apprentices with a formalised indenture setting out the terms and conditions under which their apprenticeship should be served. Only ten thatchers are known to have trained through a formal apprenticeship before the Second World War (Cox & Letts 2000, 56-7). Now, what had been an informal arrangement could gain the respect that the training of masons and carpenters had achieved as long beforehand as the Middle Ages. Moreover, it meant that traditional methods of training were not jeopardised. Even so, the evidence from Cambridgeshire suggests that the majority of thatchers were trained informally in the established traditional way, and the Bureau's policy has had no effect whatever.

The Bureau also turned to vocational training schemes. Residential courses began in

Northamptonshire in 1965-6 at Knuston Hall. These were of short duration and were designed to improve the technique of apprentices. Soon special courses in thatching in water reed joined the curriculum. These were for both masters and apprentices, and clearly designed to extend their abilities to what the Rural Industries Bureau believed to be the 'undoubted material of the future' (Cox & Letts 2000, 40). These courses continue, but the impact on the craft of an annual intake of about a dozen trainees, much reduced by those who drop out, is not great, and, again, Cambridgeshire thatchers seem to be unaffected by it.

The Rural Development Corporation is another body that has become involved in training in the hope of greatly increasing the number of thatchers at work in England (RDC 1988), although they do not appear to be working in Cambridgeshire. The Corporation claims that this has undoubtedly improved the standard of work available, but it has also discouraged the use of unorthodox local styles and techniques.

This itself has been abetted by improved transportation, which makes it possible to acquire thatching materials much more easily than formerly when they were restricted to what was produced locally. Changing demand particularly has stimulated easier access to the reed beds of the Fens, and even to sources from abroad. The thatcher can now afford not only to transport raw materials over long distances to his place of work, but also to own a vehicle that enables him to transport himself likewise over some distance to his place of work on a daily basis. This would have been unheard of prior to the Second World War, when the extent of his working area was restricted by how far he could walk in a day (see graphs in Appendix B).

The thatching techniques used today for the three main raw materials, wheat straw and water reed, have apparently changed very little over the centuries. This is largely because thatching techniques are still taught by their being passed from father to son and in general have rarely been written down and never completely so. There is plenty of evidence for this in the roofs themselves. A comparative examination of surviving ancient thatch and the brand-new thatch of today shows that there is little substantial difference in how they have been laid (see graphs in Appendix B).

The differences in local traditions of thatching have become increasingly recognised over the last twenty years or so. By the late 1980s a survey of thatched houses in the Wellingborough district of Northamptonshire showed that ninety percent of all roofs that had been thatched over five years beforehand had been done in long wheat straw, whereas only six percent had been re-thatched in this clearly traditional material in the ensuing years (Cox & Letts 2000, 77). Were such a process to continue, this district's traditional thatching material would have largely disappeared within thirty years. Thankfully, this has not been the case in neighbouring Cambridgeshire, a county whose traditions still evidently survive.

Pt 2: Cambridgeshire

The county of Cambridge lies to the south-east of Northamptonshire and to the west of the two East Anglian counties of Norfolk and Suffolk. To the north is the Wash, a deep bay bordered by desolate areas of marsh, fen and shallow, sluggish waters into which the rivers of Cambridgeshire drain.

Geologically most of the county lies on Cretaceous strata, the east and south-east on chalk, much of the remainder on Greensand, firstly Upper Greensand or gault clay in a band running north-east to south-west just to the west of Cambridge, beyond which is a narrow band of Lower Greensand. Finally the north-western parishes lie on a band of Jurassic Kimmeridge clay but this is well below the surface soils. While the chalk forms downland, the remaining geological zones are practically flat. In the north there are overlying deposits of silt and a build-up of peat. These are cut by numerous drainage channels and rivers, which drain into the Great Ouse and make up the Fens.

Cambridge has three distinct topographical zones. The chalk downland is generally dry, with characteristically thin, well-drained light soils. In the north-east of the county around Newmarket this becomes distinctly heathy. The Greensand, by contrast, produces deep and heavy wet soils in which clay predominates. The Fens, have their own rich black soils, independent of the underlying geology of clay, that result from silt washed down by the Cambridgeshire rivers, and from centuries of decayed vegetation. The soils of the Fens, historically, were of little value until drainage made them viable for arable farming. While the Romans began the process of drainage, and the drainage schemes of the seventeenth century achieved a certain fame, if not notoriety, it was really the advent of the steam engine in the nineteenth century that transformed the fenland and released its full potential for bearing crops.

Cambridgeshire is well known for its bleak climate. In fact it is among the driest counties in Britain. Its average annual rainfall is between 500 and 625 mm (20-25 ins), and therefore similar to that of much of Essex, and the lower parts of eastern Nottinghamshire and Northamptonshire, and western Lincolnshire. This rainfall is well below that of much of the rest of south-eastern England, which has about 125 mm (5ins) more, and contrasts even more with the heavier rainfall of western counties, which lies between 1000 and over 2500 mm (40 to over 100 ins) annually. Despite sharing figures for duration of bright sunshine with much of southern England, the average temperatures are extreme. In winter the average temperature of 3-4 degrees Celsius is generally lower than in most parts of lowland England, by at least 1 degree, and more when compared with the mild West Country. In summer the region is generally hot, its average of 15-16 degrees Celsius being typical of the southern and Midland lowlands.

The Cambridge climate generally favours arable farming. The tripartite division of the county produced three clearly defined agricultural zones. The downland is classic sheep-corn country, its productivity being enhanced by the climate. The damp clay soils of the west are well suited to cattle, although arable is also part of its traditionally mixed farming. The Fens, however, have a long history of change, dependent on the success and failure of various drainage schemes since at least Roman times. But, until the agricultural boom of the mid nineteenth century, the Fens were traditionally associated with stock-fattening, horse-breeding, dairying, fishing and fowling (Thirsk 1967, 1-15, Fig. 1). Apart from these agricultural products, the Fens were the most productive region for water reed in the whole country. Although much reduced by drainage in the nineteenth century, this is still the case (Letts 1999, 12-13).)

The predominant arable crop in medieval Cambridgeshire was barley, as in neighbouring Norfolk (Thirsk 1967, 45), with wheat the runner-up. This seems to have continued for many centuries. When Daniel Defoe travelled through Cambridgeshire in 1722 he entered the county from the heaths around Newmarket and reached the Gogmagog Hills, the highest point of the Cambridgeshire downland. From their slopes he saw the Fens in the distance, 'almost all covered in water like a sea', and the rest 'almost wholly a corn country; and of that corn five parts in six of all they sow, is barley.' (Defoe, *Tour, Letter 1*).

Charles Vancouver writing of Cambridgeshire agriculture in 1794 found the heaths of the north-east of the county devoted to sheep walks, and much of the downland to grain. The lower parishes in the west of the county and, far more so, the fenland parishes to the north of Cambridge were still in need of drainage. Indeed the area devoted to arable (about one third or 150,000 acres) roughly equalled the area of waste and fenland, the remaining third of the county being either pasture or woodland. He recorded that the market for grain in his day was so strong that land in some parishes was pared and burnt so as to increase the acreage put under the plough, and he complained that this practice was being extended 'to thinly stapled high lands in the county' (Vancouver 1794, 202). Barley was still the major crop, but for every five bushels of barley, about four bushels of wheat were harvested, and oats and, to a lesser extent, rye were other significant grain crops (Vancouver 1794, table opp. 193).

When William Cobbett made the journey from Royston to Huntingdon in 1822, he passed through Wimpole, noting 'very stiff loam at top; clay beneath for a considerable distance', and greatly in need of draining; further north, near the village of Caxton, he found 'strong wheat-land, that wants a good deal of draining.' All in all, Cobbett was unimpressed: the land was poorly farmed, and only good for fox-hunting (*Rural Rides*, 1, 80-3).

Vancouver reported on Cambridgeshire's agriculture when the wars with revolutionary France were pushing up the price of grain. The additional employment caused by this demand was readily filled, even though the days were not long enough to bring in the large harvests (Vancouver 1794, 175). Cobbett, by distinction, saw the county seven years after the termination of the wars in 1815. This had brought deep depression, particularly to grain. Barley provided the raw material of the numerous Cambridgeshire brewers. Nevertheless it was probably the French wars that tipped the balance away from barley toward wheat. By 1900, 95,000 acres were down to wheat, while only 52,000 were down to barley, a proportion that remained for a while, until the eve of the Second World War when 104,000 acres were given over to wheat, but only 33,000 acres to barley (VCH Cambridgeshire, 1948, 2, 72-6).

Since then wheat has increasingly dominated arable farming in the county. The light soils of the Cambridgeshire downland produced plenty of straw for thatching. The clay soils of the western side, which were largely devoted to cattle pasture, also provided straw for thatching, as well as for cattle fodder and litter. With so little industry in the county there were few alternative sources of employment to agriculture, so unskilled labour remained relatively plentiful and therefore cheap. Unlike the industrialised counties of the north, there was little incentive to introduce labour-saving machinery. Traditional farming therefore continued longer here, and, with it, the county's grain crops produced plenty of straw with which to thatch its generally poor cottagers' homes.

Barley is unpopular as a thatching material. Compared with wheat straw, its straw is short, soft and brittle. 'Too soft, too difficult of assortment into lengths, too pervious by rain, and too liable to rot' was one nineteenth-century view. Nevertheless, with so much grown, it was certainly used on Cambridgeshire roofs. A house, now known as Bramleys, at Shudy Camps (Sc 08), was thatched in the fifteenth century with a base coat of barley threshing waste mixed with a small amount of rye, wheat and other vegetable matter (Letts 1999, 22-3, 57).

This state of affairs was of long standing. Typically, the sheep-corn country of the Cambridgeshire downland was historically inclined towards firm manorial control and a more uneven spread of wealth between landlord and peasant than in country devoted to cattle pasture. Its peasantry was generally too poor to consider anything but fairly primitive housing.

This remained the case until the French Wars, and, to only a slightly lesser extent, the period of high farming in the middle of the nineteenth century, when many large agricultural estates were characterised by newly enclosed farms and the construction of model cottages for their agricultural labourers. This had barely started in Vancouver's time, when only a tenth of Cambridgeshire's arable had been enclosed. He noticed that enclosure increased the population and resulted in the building of cottages, which were filled with families. 'The farm houses... are generally esteemed good', but the farm buildings were of a much poorer quality (Vancouver 1794, 175-9). A hundred years later enclosure had converted much of the sheep-corn country on the east side of the county, which is notably filled with model farmhouses, many dating from the 1840s and '50s as a result (Bottisham, enclosed in 1808, Swaffham Prior, enclosed *c.* 1810, RCHME 1972, xxix-lii, 9-10, 125-8).

These model farmhouses and cottages in newly enclosed parishes were in the main roofed in tile or slate. Nevertheless, both on the downland and elsewhere in the county agricultural labourers still had to make do with cottages that for the most part have been swept away because they were so poor, or old houses that were subdivided and have since been returned to single use. The total number of recorded cottages with evidence of these subdivisions is fifty-two. The most severe example of this was Oak Cottage, Littlington (Li 01), which was split into five units at one time. Conversely, 1 & 3 King Street, Rampton (Ra 05), which was originally two dwellings, was converted into a single dwelling and then reverted back to two. The data showed there was no set pattern to this practice and examples can be found throughout the county. Husbandmen and yeomen a rung or two up the ladder because they owned small holdings or even small mixed pastoral and arable farms on the western side of the county could build more substantially, but even their houses were often roughly built. Indeed, many small cottages survive in Cambridgeshire, for instance those of Foxton, that are so roughly built that they suggest that only the poorest craftsmanship went into their construction. Their roofs are formed from inexpensive local materials, using coppice poles, wattle or brush wood when squared timber was unavailable. Such roofs were not strong or regular enough to support tiles, so straw thatch was an unavoidable choice. Moreover it was cheap, and water reed was either expensive or unavailable.

Chapter 2 - MATERIALS

Part 1: thatching materials and their use

Local building materials are today generally recognised for their ability to provide a harmonious feature in the landscape of their origin. They give the buildings in which they are used a sense of unity as well as being rich in both colour and texture, and sometimes relatively unusual as well. While most people's response is determined by sentiment, it is equally true that alien materials, especially those that are the products of modern industry, tend to jar and produce an unwelcome emphasis in a natural landscape.

Timber, stone, cob and brick form the various underlying traditions of walling in all the regions of Britain, and it is the same with roofs. Stone tiles, fired clay tiles, slates and thatch once again characterise the roofs of the British regions, and, combined with local walling materials, are an essential part of the pattern of British building. Thatch has a special place in this pattern on account of its antiquity and former ubiquity. Above all other materials, it appeals to sentiment. Sceptics equate it with tea cosies, but for most people its unashamed picturesque qualities need no justification. Two centuries of art are argument enough for its aesthetic qualities.

Cambridgeshire is typically a county of thatched buildings. As one of the main corn growing counties, thatch is a traditional material in this location. Agricultural wealth was historically unevenly distributed, leaving the bulk of the rural population too poor to be able to afford an expensive tiled roof. This state of affairs lasted until recently, so that there has been less replacement of thatch since the Second World War than in other counties such as Surrey, which has benefited from an influx of wealth from London, but paid a price in the loss of many of its formerly thatched houses.

In former times every farm in Cambridgeshire had in its rick yards large quantities of threshed straw. Much of this was required for a variety of agricultural purposes, such as fodder and litter for cattle, but even so there was always a surplus of suitable straw available for thatching.

Modern developments of farming and the introduction of the combine harvester have however seriously depleted the thatcher's source of supply.

All of the older varieties of wheat produced good long straw that was ample not only for cattle, but also for thatching. This has come to be known as long wheat straw. These older varieties of wheat suffered from various defects. The plants themselves were vulnerable to wind and rain, were easily beaten down, and were consequently difficult to harvest. Scientific plant selection and breeding have now produced varieties that, whilst having a heavier yield of grain, are borne on stalks that are both shorter and less pliable. Fortunately there are still wheat varieties such as Cappelle de Preux and Huntsman available to the farmer, which also serve the needs of the thatcher. They produce a good yield of grain and a straw that is suitable for thatching.

The British have been sheltering beneath roofs of straw or water reed for thousands of years simply because thatch is one of the best roofing materials ever devised. Nevertheless many people are surprised that a roof made of a porous and relatively insubstantial material such as straw becomes impermeable to the precipitation of rain when properly applied.

Thatch works because water falling on a roof will run along exposed segments of straw or reed and drip from segment to segment until it runs off the roof at the eaves. The heavier the rainfall, the greater the degree of infiltration, but precipitation rarely permeates more than a few centimetres or an inch or two below the surface of a well-thatched roof. But thatch need not be evenly applied, trimmed, or even well fixed to provide a useful temporary shelter for man or beast. The rain-shedding success and longevity of thatch is a product of several basic biophysical factors, the most important ones being the density of packing, the degree of overlap and exposure of its components, the strength and porosity of the materials employed, and the pitch of the roof in question.

The relationship between roof pitch and packing density is linear and negative, the steeper the pitch, the more rapid the run-off and the less dense the packing and overlap that are necessary to prevent infiltration. Conversely, the shallower the pitch, the slower the run-off and the greater the density and degree of overlap required to shed water efficiently. A steep pitch and dense packing of undamaged straw will provide the most watertight and best lasting roof of all. Moreover, the thatch must be fixed securely so as to prevent infiltration, but not so tightly as to prevent the roof from releasing moisture in dry weather.

In Cambridgeshire, as in most parts of Britain, a roof of long wheat straw is thatched in several layers. These comprise a base layer, a middle layer and a weathering coat. The base layer often comprises two parts, the fleeking layer and the base coat itself. A fleeking layer is the innermost layer of a thatched roof. Its purpose is to support the thatch between the rafters of the roof, and to stop the base layer from falling through the spaces between the rafters. Fleeking layers are rarely used today, because most roofs are battened in the same way as they would be were tiles to be laid on them. The battens not only support the base layer but also provide a secure framework into which the bundles of thatch forming the weathering coat can be tied. When an old roof is entirely stripped, the fleeking layer, if there is one, is usually stripped off too, and the rafters are battened before the new thatch is laid.

Nevertheless there is no sensible purpose in stripping a fleeking layer, since it is not prone to deterioration if the layers above are kept in good order. Fleeking layers therefore do survive, and in general they are of some antiquity. It is unclear when they were first replaced by battens, and there are no records that indicate when this change occurred. The change appears to be lost in the depths of time, but, given the secrecy of the thatching fraternity, this probably only means about a century ago. D.D. Stanford recalls that during his thatching career he encountered fleeking layers several times and during the course of re-thatching had repaired them. He stated, however, that he had never laid a fleeking layer himself, when re-thatching from the rafters, nor did he know of any other master thatcher who had done so. This included his father C.G. Stanford, under whom he had served his apprenticeship, and who was working as long ago as the second decade of the twentieth century.

Fleeking layers achieved their purpose by taking the form of a course woven mat. They had to have a certain amount of rigidity, and were usually made of water reed, broom, bull rush, or thin hazel or willow withies. Other materials found in several Cambridgeshire fleeking layers, and also described by John Letts (1999, 44), include the straw of rye and emma wheat, and also bracken. The matting woven from these materials was tied down to the roof rafters in sections of a manageable size that varied to suit individual thatcher's preferences. Other forms of fleeking are still found elsewhere in Britain: for instance in highland Scotland and the Isle of Man a thick layer of turf is laid on the rafters (Fenton & Walker 1981, 54, 66; pers. com. Anthony Quiney). This not only provides a solid base but also takes up irregularities in the rafters so as to provide a more-or-less even base for the thatch.

In Cambridgeshire, however, it is the base layer rather than the fleeking layer that makes up for any irregularity in the roof structure beneath. Once the mat-like fleeking layer has been tied to the roof rafters, a new base layer is secured to the fleeking layer. The base layer usually consists of threshing waste. This waste straw was also employed for such tasks as bedding for horses and other farm animals. Despite this, its value would have been very low. In the majority of cases the landlord or whoever owned the field and its crop would have freely parted with it, the only payment exacted from the recipient being the physically hard labour in collecting it and carting it to the required location. The base layer was originally tied down with tarred cord and secured with a sowing-like technique. Taken together the fleeking and base layers make a strong and substantial base for the weathering coat, and, provided that this is properly maintained and replaced when needed, may last almost indefinitely. Indeed, a significant number of Cambridgeshire roofs still have late medieval fleeking and base layers in place today. One further function of the fleeking layer is to provide a key for a thick ceiling coat of lime plaster. A solid application of plaster like this used to provide an ideal finish to the under side of the roof void, which could then be decorated, or in a building of lower status would be left to form a plain ceiling.

It soon became clear from practically all of the roofs thatched in long wheat straw that comparatively ancient base coats of straw waste survive beneath them, and that these, like the fleeking layer, are very rarely stripped off when the roof is re-thatched. This is because the weathering coat usually maintains it in very good condition for an exceedingly long time, indeed to such an extent that the base coat can be shown in the majority of cases to be composed of the original material and secured by the original fixing method and fully intact.

This original material often comprises varieties of wheat, rye and other cereals that were available during the late medieval period, but are not found today. This is of great importance for dating the particular structures in question. But, although their presence is suspected in many roofs, particularly those that have smoke-blackened base coats, only in the case of Oak Cottage at Litlington (Li 01) have they been identified with confidence (pers. com. John Letts).

Just as it has always been common practice to leave the fleeking and base layers, when a roof comes to be re- thatched in long wheat straw, it is also common to leave whatever part of the weathering coat remains in reasonable condition. Nevertheless, the new coat will cover over it, leaving it as a middle layer sandwiched above the base. Occasionally, the middle layers build up over a long period of time until the depth of thatch becomes extremely deep (see Chapter 6).

While the practice of layering a thatched roof from base coat to weathering coat is more or less universal in Britain, the roofs vary from region to region. In Cambridgeshire straw or reed make up all three layers, but in others this is not so. On the Hebrides and the Isle of Man, the base layer and the fleeking are combined and consist of turf or peat, and, while turf may also make up the outer layers on the oldest traditional Hebridean roofs, those of the Isle of Man are made of either wheat straw, or occasionally of marsh grass. In Devon the fleeking layer sometimes comprises a basketwork of woven wattles (Cox & Thorp 2001, Pl. 14).

The materials used in the thatched dwellings of Cambridgeshire over the last six or seven centuries have varied greatly, but only in detail. This is confirmed by the published record, by discussion with thatchers and, most importantly, by a physical survey of the buildings themselves. For example, roofs of straw, as opposed to reed, always have had three layers, a base layer, middle layer and top layer, but the survey shows that the base layers of a small number of these roofs that can be dated to the late Middle Ages contain types of straw no longer found today.

Various unusual materials such as wild grasses, broom, heather and bracken reflect the ingenuity of the less fortunate members of the community in providing themselves with a roof over their heads, and these are occasionally found on what would have originally been peasants' cottages. Broom, for example, was used as a base or fleeking layer of a summer house at Bassingbourn-cum-Kneesworth (Bs 03), and this is still in place.

As outlined above, the types of thatched roof that both span the widest time period and are still current throughout the area today are known as long wheat straw, combed wheat reed, sedge and water reed. Long wheat straw and combed wheat reed essentially make use of the straw of wheat and, occasionally other cereal crops, but differ in preparation and fixing methods. These materials require some degree of skill in their effective utilisation and would once have been found mainly on buildings of higher status than lowly cottages (which would have used straw waste or other secondary materials). Of these materials, water reed, when correctly laid and firmly fixed, makes the most durable thatch; a particularly fine type is Norfolk reed. Then, as now, it was the most expensive of these materials, and consequently the least used.

In general terms there are two varieties of wheat, spring and winter, the latter being the most suitable for thatching when, according to the treatment it receives after reaping and binding, it is used in the form of combed wheat reed (often known as Devon reed because it is extensively used in Devonshire) or as long wheat straw. Spring wheat is occasionally prepared for thatching purposes, although it makes a poor substitute. The reason for this is that the stem is not fully matured at the time of harvest. The wall of the stem is therefore significantly thinner than that of winter wheat, thus reducing its durability and life span.

Other materials variously found on roofs are wild grasses, broom, heather, bracken and a variety of aquatic plants, plus a group of unusual materials such as dock, willow shoots, nettles, and oak shavings, the latter being a by-product of the underwood (coppicing) and barrel-making industries. For instance, a summerhouse in the walled garden of 10-12 Old North Road at Bassingbourn (Bs 03) is thatched in heather, probably obtained from the downs above Royston. The preparation of oak shavings is different from that of all these other materials because of their rigid nature, and they can only be used by tying them into bundles of about 100mm (4ins) in diameter and thatching with these.

Wheat Straw

Wheat straw is used widely throughout Cambridgeshire where several modern varieties are grown. It is predominantly taken from winter wheat, which is cut and stooked at harvest. The older the variety of wheat, it would seem, the more popular it is with the thatcher. Traditional varieties that are well over a century old, such as Little Joss, Elite, Wilma and Square-headed Masters, are still occasionally grown, but modern farming dictates that a greater yield of grain must be achieved than these produce. More recent varieties are therefore far more widely used, Maris Widgeon, Maris Huntsman, Flanders and Cappelle de Preux being the most common. Like these, Aquilia has also been found to be of use to the thatcher (Cox and Letts 2000, 21). Grain yields are from a little over 3 tonnes per hectare (1.2 tons per acre) for the older varieties, to a more respectable 5 tonnes per hectare (2 tons per acre) for Maris Widgeon and slightly more again for Huntsman and Aquilia. Cappelle de Preux was the first variety after the Second World War to produce in excess of 7 tonnes (3 tons per acre). Straw yields, however, are higher from the older varieties that have now largely been replaced.

The following wheat varieties were introduced during the first four decades of the twentieth century: Squarehead Master (1900); Red Marvel (1904); Starling (1907); Partridge (1907); Victor (1908); Little Joss (1910); Wilhelmina (1910); Yeoman (1916); Vilmorin Hybrid 27 (1927); Rampton Rivet (1934); Bersee (1935); Holdfast (1936); Juliana (1936). As described below, practically all of these have now been superseded as a result of the pressing need to increase yields in the face of a government-sponsored drive for greater efficiency.

Harvesting and Processing

By the time the straw is harvested the crop should be in the region of 1.2 m. (4 feet) tall and have straight stems if it is to be ideal for thatching. The strength and texture of the straw will for thatching purposes be greatly improved if the crop is cut whilst the stalk is still partially green and the grain is slightly cheesy in texture. At this stage it is not quite ripe; its fibres are still flexible enough to be readily worked, but are now well enough developed to last well. After cutting and binding, the sheaves should be stooked in the field for five to fourteen days depending on the weather conditions. The grain will then ripen, but the straw will stop maturing, and its flexibility will remain. Following this, the sheaves should be removed to either an outside rick and covered in thatch or tarpaulin, or put in a barn, possibly for some months, until threshing can begin. Problems that can arise during this period are rooks attacking the sheaves, and rats getting into the stack or rick. However, ricking or storing the crop is not a universal practice and, when the weather allows it, some straw is harvested, threshed in a drum and then taken directly to the roof it is destined to cover.

Threshing too must be carried out skilfully as the straw can be damaged if it is not fed carefully into the threshing drum. After threshing, the straw must be tied into bundles. It is a very common practice to use a single- or double-string tying device behind the threshing machine. This ties the straw into bundles that can then be stacked into ricks for easy storage until required for use. The bundles are tied with the butt ends more or less together, which is an advantage for the next stage of its preparation. Nevertheless, tying devices are fragile and prone to frequent mechanical failure. While the straw may be tied by hand and then stacked into ricks, this needs physical labour and, because it is sharp, the straw is difficult to handle and, being brittle, can easily be damaged.

Straw length and quality

Length, strength and flexibility are the three principal factors that determine a cereal straw's suitability for thatching. Having a tall strong stem is an advantage to a plant growing in a densely planted, weed-infested field, for it improves its ability to intercept the sunlight and thereby increases its chances of maturing seed for the next generation. Rapid stem elongation engendered by the competition for light, on the other hand, weakens the plant's lower internodes, and this is also encouraged by high soil fertility (Moir & Letts 1999, 62-3).

Intensive selection of cereals undertaken for many years at the Cambridge Plant Research Institute (CPRI) with the aim of producing a shorter stem generally reduces overall grain yield and plant vigour at the same time. However, genes for dwarfing which reduced internode lengths without reducing yield were introduced into high-yielding bread wheats beginning in the late 1940s, and their descendants now dominate mechanised cereal production in Britain. High-yielding dwarf varieties are now being released that mature at less than 500mm (1.6 ft) in height. By contrast, mediaeval wheat crops probably produced stems that averaged over 1500mm (6 ft) when grown in moderately fertile soils, producing tall straw that was ideal for thatching, litter, fuel and fodder (Moir & Letts 1999, 69). Only modern hybrids of these varieties are generally available, and these may grow to a height of 1200mm (4 ft). They are occasionally grown, but only for thatching. Straw cannot be used for combed wheat thatching if it falls much below 700mm (2.3 ft) in length and older varieties now grown specifically for thatching rarely produce straw longer than 900mm (3 ft) after threshing has removed the ears of grain (Moir & Letts 1999, 66-7; CPRI press release).

Documentary sources suggest that rivet wheat, with its tall, strong, and usually pith-filled straw was widely grown, in part because it produced such excellent straw for thatching. Straw experts, however, believe that the straw of hollow-stemmed wheat is better suited to thatching than that of solid and semi-solid varieties (Staniforth 1979). Several thatchers who have discussed the topic during the research for this thesis have suggested that the pith of the solid-stemmed straw acts as a sponge, drawing moisture up to the node, accelerating rot, and reducing the straw's ability to dry out after being wetted. Solid and semi-solid straw may indeed be inferior to hollow-stemmed straw today, particularly because it has been machine threshed and applied long straw fashion. In the past, however, circumstances were different. The documentary and archaeobotanical evidence indicates that semi-solid rivet straw was once the best straw available, both for use as underlay in base coats (where it has been found), and as external thatch applied combed-wheat fashion, because of the superior qualities of its durable stem (Letts 1999, 18-20).

The production of long wheat straw and combed wheat reed is simply a matter of process. For long wheat straw the reaped grain is fed directly into a threshing drum with concave-shaped beaters. During this operation the stems are frequently broken, and the ears and butts become mixed. Not only is the leaf retained but also a quantity of whatever else happened to be growing in the field at the time of harvesting and was gathered with it.

For combed wheat reed the reaped grain is not immediately threshed (Cox & Thorp 2001, 25-32). The harvesting process involves binding, stooking, stacking and combing, a labour-intensive activity calling for a co-operative endeavour by the farmer and thatcher alike. Before the days of mechanisation on the farm, the combing of wheat straw was carried out by hand. This was tedious work and was normally undertaken by women. The various hand methods at first employed were eventually superseded by a machine known as a reed comber. This machine was fitted to the top of the threshing drum and removed the grain and flag from the wheat, without the straw going through the drum. The straw thus comes from the machine undamaged and with the butts all lying in the same direction. Instead, before the wheat enters the thresher the sheaves are passed through a comber, a fairly complicated piece of equipment which holds the straw butts captive in a pair of belts while a drum with iron teeth rotates and combs the wheat, removing any weeds and rubbish and much of the leaf. Having passed through the comber, the wheat reed, as it is now known, passes along a conveyer to a tier, where it is tied into bundles of convenient size. Each bundle is butted on to a board known as a spot board and after being trimmed is transported to the thatching site or the rick to await its destination. Alternatively, when a machine-tyer is not available, the wheat reed may be hand tied. In this instance, the wheat reed falls into a cradle immediately it leaves the comber. It is then placed in a winch frame that draws the wheat reed tightly together under pressure, thus facilitating the operation of tying and producing a tightly packed bundle. Needing extra equipment and greater care in processing, combed wheat reed is a more expensive product. Nevertheless, this process prepares the material so that it can be used for thatching in a similar manner to water reed, resulting in a similar surface texture with only the butts visible on the surface of the weathering coat.

The traditional bunch of wheat reed is normally tied with binder twine and is known as a 'nitch' and weighs 13kg (23 lbs). Orders of combed wheat reed are quoted at 'per ton on the farm'. Though the process of combing and tying slows down the work of threshing, this loss of time is offset by the higher price obtainable for the straw in the form of combed wheat reed, and, providing the length does not fall below 680 mm (2.25 ft), it is still suitable for combing, although the ideal length is 1000 mm (3.25 ft).

Water Reed

Water reed is an abundant colonising plant that spreads rapidly from rhizomes as well as by seed. Moreover it can also spread along aerial shoots. It occurs in wet places throughout temperate parts of the world. In Britain it is most common in lowland and coastal salt marshes, but it is also widespread throughout the country in ditches and ponds. (The Reed Growers Association, *The Reed, 1976*).

Across wide areas of marshland in Britain and in particular the fens of Norfolk, which are adjacent to the borders of Cambridgeshire, there grows each year a vast quantity of water reed. Phragmites australis is a native plant, but it has now been augmented by Phragmites communis, which has been introduced from the Continent. Together, these are indisputably the finest thatching materials available today. Varying in height from 1 m to 2.5 m (3 - 8 ft) reed is easily recognised by its brown feathery seed head, growing on a single stem and having broad spear-like leaves.

Growing with this 'pure' reed in some parts of the marshes and waterways, two other plants are found. These are reed mace or bulrush (Typha latifolia), known throughout Cambridgeshire as 'boulder', and wild iris (Iris pseudacorus), known as 'gladden'. The use of these two other plants, mixed in with water reed up to the extent of 15 percent, is described as mixed reed. Some thatchers believe that this mixture improves durability, but there is no hard evidence. Even so, this mixture is often preferred because of its tapering quality and distinctive appearance.

Reed beds in Cambridgeshire and indeed throughout the British Isles vary in size from 1 to 30 hectares (2.5 to 75 acres). On the continent much larger areas are encountered but, whilst the smaller British beds may appear insignificant, they are nevertheless a potential source of valuable material.

The largest and best quality beds are in East Anglia, in the wetlands near the main Waveney, Bure and Little Ouse rivers and their tributaries and the Broads. Water reed is almost exclusively used for thatching. Although it may vary in length, texture and colour, it has similar physical qualities no matter where it originates. Thatching reed from the Continent tends to be coarser and longer than Norfolk reed, which itself can vary a great deal depending upon whether the reed beds are in fresh or salt water, whether the reed is cut from the centre of the bed or whether cut during a winter and spring which are wet or dry. Most thatchers prefer Norfolk reed owing to its excellent workability as compared with its Continental counterparts.

Water reed quickly invades and dominates shallow water habitats. Natural reed beds are actually an ephemeral stage in the process of ecological succession that turns wetland into forest. Unless dead and decaying vegetation is washed away each year, as in some coastal salt marshes, peat accumulates and raises the soil level creating improved habitat for terrestrial species. In the past, water reed was exploited wherever it grew, but due to increased overhead costs for harvesting, storage and processing only the larger areas are now used. Most reed beds were originally laid out for manual harvesting with boats being used to transport the crop. Dykes across the larger reed beds tended to be parallel and at right angle to the main river, making the beds that they surrounded rectangular. The dykes, the local term used in the Fens, comprised both a ditch and an embankment made from the excavated soil. They were used to control the water levels. Many modern reed beds in Britain exist only because their annual primary production is harvested each year as thatch and does not contribute to peat formation.

Existing reed beds in England are a remnant of what was once a much more valued and plentiful resource (Bidd & Lunn 1982). According to Rackham (1986), a quarter of Britain is, or once was, wetland, and before the advent of modern subsurface drainage a quarter of the land now in cultivation was waterlogged for much of the year. In areas of low-lying heavy clay, reed grew in the saturated hollows of ridge and furrow fields and would have been plentiful in many of the ditches, dells, ponds and hay meadows that littered the medieval landscape. But minor local sources were harvested for specialist purposes and are unlikely to have satisfied the general demand for thatching reed. Some reed beds were particularly managed so as to produce a fine quality of reed for those estates that demanded it and could pay for it. Smaller reed beds that may have started life naturally but in an isolated position probably provided enough reed for a limited amount of thatching in adjacent regions, but the higher cost of reed more generally restricted its use to higher-status buildings far from the source of supply. A thatcher intent on covering his roof in reed could probably have gathered sufficient reed for the task almost anywhere in the country, but only over a period of several years.

Higher-status buildings also included some farm buildings. One example of this within the boundaries of Cambridgeshire is the great barn at Wimpole Hall (Wm01). This was originally slated, but was thatched in reed, perhaps to save money, shortly before the Great War. As far as can be ascertained from the estate account books (Wimpole Estate Archives), the roofs of other barns at Wimpole were roofed in water reed that, the accounts show, was obtained from Norfolk. On one occasion the reed came from Wicken Fen.

Transport would have been by horse and cart, an approximate distance of some 25 miles along unmade roads that consisted mainly of hard-packed but pot-holed earth, and needed a team of probably one man and a boy. The average speed for this journey would have been at a walking pace of approximately 1.5 miles per hour, thus, allowing a total distance travelled during a working day of 12-18 miles, so the journey time, there and back, could have been four days. It is therefore clear that Norfolk water reed was a high status material, not only for its qualities of durability and life span, but also because its transportation costs restricted its use to those willing to pay. The ready availability of a less expensive wheat or rye straw almost certainly discouraged the need for long journeys of this kind throughout most arable districts of Cambridgeshire, once techniques of thatching with machine-threshed wheat straw had been developed.

Under suitable management, marshes can be encouraged to produce practically pure strains of reed crops apparently indefinitely, with no loss of quality or quantity and only slight variations caused by the effect of seasonal conditions on growth. Neglected marshes, on the other hand, steadily deteriorate and become clogged with weeds, alders, willows and even birch. To produce pure strains of reed crops, the three main factors in reed management need to be further explored. These are water control, weed control and harvesting routine, all of which impact directly on reed management and therefore the raw materials associated with thatching.

Water Control of Reed Beds

The best thatching reeds are grown in water. The beds should remain flooded for most of the year. This water should be moving as reed will not thrive well in stagnant conditions. In some instances, such as when the beds are part of the general Broads system or large water courses, there can be no control. When control is practicable, its main purpose is to maintain a high level during the winter to prevent the running-off of water during a dry spring. If a pumping station, as opposed to sluices, is available then it can be used to drain the beds to facilitate the use of machinery during harvesting.

A high water level during the early spring will protect the new growth, or young colts, from frost; this is particularly necessary if the reed is of high quality. However, should the colts of the coarse reed be killed by frost, most thatchers and watermen generally believe that two to three years, or shoots, of finer growth will be produced. This could be an advantage, but the crop will mature later perhaps incurring a financial penalty.

Weed Control

A reed bed that has not been harvested for many years will become clogged with lifeless reed and debris. Periodical flooding and washing by the ebb tides may fail to clear it. Under these conditions the new plants will continue to send up new shots but being impeded by the debris the growth will not be straight and is unsuitable for thatching. The reed in such a bed should be burned. This will cleanse the bed and the quality of the next year's growth will show a marked improvement and should be suitable for thatching. Thereafter regular cutting will improve the quality of the reed and, having restored the reed bed to production, no further burning should be necessary. If at any time the annual growth is sparse, the crop can be left to be harvested the following year.

Weed control is also maintained by high water levels. Dry beds become colonised by grasses, brambles, nettles and other unwanted growth. It is not always possible to maintain a high water level over the whole of the marsh, and the dry areas may slowly begin to contain a higher proportion of mixed marsh vegetation. There will also be marginal areas there the reed is not yet dominant enough to be worth cutting. In such cases, a burn-and-flood practice is usual, where the old vegetation is set alight during February and March (when it is at its driest). The new shoots will not yet be numerous enough to take much harm and the fire will make a clean sweep of the dead vegetation and allow the fast growing reed a chance to get away ahead of the weeds. The water level is then increased and maintained throughout the summer.

Harvesting of Water Reed

In the spring the root stock of these beds will produce young shoots or colts. During the summer months these grow steadily in height and turn a green hue. With the approach of the autumn months the reed turns to a light brown, but harvesting can only commence after the first frosts have stripped the flag, or outer casing, and also the surrounding leaves from the plant stems, normally after mid December. The stem of the reed is fully grown, and, as significantly to the harvester, he does not have to contend with the viciously sharp edges of the leaves. Cutting can then proceed throughout the winter into the spring or until the first colts appear towards the end of April or beginning of May. To cut later than this will damage the colts and possibly reduce the amount of reed produced the following year.

Reed can be cut annually ('single wale') or, more usually, every other year ('double wale'). Wale is the local name given to the growing season of water reed, a single wale being one annual season, a double wale being two seasons. Although a single wale is better for thatching because it contains very few dead reeds, it is less profitable for the marsh men as it is a thinner crop and therefore more effort is needed to obtain the required number of bundles. A reed bed of high productivity should produce around 1000 bundles per hectare (400 bundles per acre) single wale, or 400 to 500 bundles per double wale.

Methods or harvesting vary from hand cutting with a scythe to mechanical operations using a rice cutter, Allen scythes or a sieger - an amphibious vehicle that both cuts and binds. The traditional method of harvesting reed is with a scythe. The reed is gathered into bundles, these are opened and the butt ends are raked out and cleaned of leaves and debris. The reed is then re-bundled and stacked to dry out on the marshes. When dry, the bundles can be transported either into storage or direct to the thatcher. Harvesting water reed was clearly a far harder process than harvesting wheat for straw, and this remains true today. So the overall result is that water reed has always been a more costly material.

Unfortunately this traditional method does not attract new marsh men. In 1950 CoSIRA carried out experiments in cutting reed with a mechanical scythe. A large gathering box was installed immediately behind the cutting blade where the reed was collected and, when full, removed and laid to one side to be cleared and bundled. This process is now widely used and approximately 400 bundles per day can be produced per machine.

In the late 1960s CoSIRA introduced the 'Seiga' reed harvester, which was imported from Denmark. This is a mechanical harvester on very large tyres that make the whole contraption amphibious. The machine produces bunches of reeds at the rate of 2000-3000 bundles per day. The most recent model incorporates a transporter to enable the reed to be transported to hard ground immediately.

Water reed quantities are not calculated by weight, but by bunch. The standard size bunch of home-produced reed is 600 mm (2 ft) in circumference, derived by measuring around the 'tie', which should be 300 mm (1 ft) from the butt end. Imported reed is delivered in a bunch measuring 1 m (3 ft) in circumference, determined by the same method. Most thatchers in Cambridgeshire split the larger, Continental bunch to the smaller, home-produced size as they are used.

Sedge

Sedge (Cladium mariscus) grows in the same areas as reed and is usually maintained as a complementary crop. Each species will infiltrate the other's ground. Sedge is an evergreen, continuously growing plant with a three-sided rush-like leaf with a fierce serrated edge. It grows chiefly in the fens and marshes of Cambridgeshire and Norfolk, and is used for ridging purposes. Its length and quality may vary according to the nature of the soil where it is growing, and it may under favourable conditions reach 2m (6.5 ft) in length.

Sedge can be cut all year round and is more easily handled when in a green state, before it ripens. It is better harvested during the summer, with work traditionally starting in late July, because this splits the harvest between reed and sedge into two quite separate periods of the year and also tends to kill any reed that may be growing in amongst the sedge. Summer cutting also ensures adequate growth before the onset of winter. Thereafter it becomes difficult and even painful to handle.

Using a long scythe against the lay of the sedge, the cutter often works under similar conditions to those found when harvesting reed. The main problem is the amount of water under foot that one has to contend with. Having mown a swathe with his scythe, the cutter gathers the sedge together and then, because of its length, ties it with two strings into bundles, which should weigh approximately 10 kg (22 lbs). The method of cutting, however, may vary from place to place. Normally sedge is similar in length to reed found in the same beds. Occasionally one may see a sickle being used to cut the sedge, especially when it is much shorter in length than usual. Sedge is always gathered into smaller sheaves because its leaves are so viciously serrated. The smaller bundle so formed is known as a 'sheaf' or 'shove' which in weight should average 0.3 kg (7 lbs). These sheaves are tied as the cutting operation proceeds, a few strands of sedge being twisted together to make a bond with which the sheaf is secured tightly around its girth.

As the sedge matures so it changes colour to a beautiful golden brown. Being very pliable in character, having an estimated life of a good twenty years, and being pleasantly and mildly contrasting in tone, it is a suitable material for ridging purposes. The finished sedge ridge with its cross sparring and clean-cut pattern is entirely complimentary to a water reed thatched roof, enhancing its appearance in tone and texture.

Sedge, unlike reed, is harvested every four years when its length is long enough to be suitable for ridging. If it is cut more often, the sedge will not be long enough for the thatcher and other marsh plants will be encouraged to grow in its place, thereby reducing the crop. It is cut either by hand or with an Allen scythe and, though not usually cleaned to the extent of reed, the worst debris is taken out.

The same type of management policy as for reed is used, apart from the timing of water height. Where reed beds are flooded during the summer months, the sedge bed is drained during this period to facilitate harvest. Burning when necessary is carried out from June to August. This reduces the amount of old and decaying plant matter, giving ease of access for harvesting and producing a highly valued organic fertiliser in the form of the potash produced. This then sinks into the mud and silt at the bottom of the bed, enriching it, so the cycle then continues with the young plants feeding off this enriched substance and producing a higher yield for the following harvesting period. Burning is not necessarily carried out every year, but only when the beds become clogged with decaying plant matter that impedes the growth of new plants.

A Note on Veldt Grass

Although veldt grass is not yet used for thatching in Cambridgeshire, its recent introduction to southern England demonstrates how willing a few thatchers are to innovate and how unwary house owners are to try something new, particularly where there appears to be a financial advantage. Indeed, at first sight, a roof thatched in veldt grass looks as though it has been thatched in water reed, but at the substantially lower cost of long wheat straw.

Veldt grass is not native to Britain. It comes from South African savannahs, where it is indigenous, and grows freely. It has been used for thatching locally in South Africa for centuries and in the savannah climate is extremely effective. It was first imported to England in 1995 and used in the West Country, where it has caused local authority conservation officers great concern. This is partly because, to the expert, its appearance is significantly different from that of the traditional material combed wheat reed, its stems being about half as thick, and marked down their length by bulbous nodes from which the leaves spring.

This, however, is only a small part of the problem. The stems of veldt grass are not hollow, or nearly so, as most wheat straw is, but filled with dense pith. Moreover, the bulbous nodes tend to split in a mature stem, thus allowing moisture penetration to the absorbent pith. It quickly appeared that in the wet climate of the West Country, as opposed to that of the dry savannah, the ability of the pith to absorb and hold moisture leads to rapid deterioration. This gives a roof of veldt grass a potential lifespan of perhaps only two thirds that of a long wheat straw roof. It is likely that veldt grass would fare better in the drier climate of Cambridgeshire, but, even here, it remains doubtful that it would compare favourably with long wheat straw or other indigenous materials on purely economic terms. It is certain, at least at present, that conservation officers within the county will resist it on both historic and aesthetic grounds.

Because veldt grass is so similar to combed wheat reed to the untrained eye, it is difficult to identify, and, because it is so much cheaper, those who are unaware of its poor lasting qualities are tempted to see it as an economic alternative to the native material. There are now cases, most recently in Hampshire, where roofs have been thatched in veldt grass, the unwary owners having fallen victim to the temptation of low cost and presentable appearance, only to discover that they have fallen foul of the local conservation policy as well as buying a roof that may last a far shorter time than a conventional one (pers. comm. John Letts, who referred to his article in the Master Thatchers Journal; C.P. Stanford, personal observation and report for Hants CC).

Part 2: Judging Thatch

Identifying the Thatch Material

The process of analysing the various types of thatched roof in Cambridgeshire during the first stage of the field work proved to be the most enlightening, particularly since it meant learning the craft of thatching and interrogating thatchers about both their methods and their experience.

Perhaps one of the most important yet most difficult things to learn about thatch and the infinite number of variations in its style, quality and age, is how to identify the type of material with which a roof has been covered. With an experienced eye there are telltale signs that can be distinguished even from a distance. The task can be made easier if a pair of binoculars is to hand.

The starting point for the identification of the roofing material is to consider the shape of the roof covering. Is the roof rounded? Has it got a soft and curved shape? Or is it flat and angular, more accurately following the shape of the timbers of the roof? Because of the fixing method and to some extent the nature of the material, both long wheat straw and combed wheat reed tend to produce a more rounded shape than water reed does, and give soft lines to the roof shape (see Ill. 3). These lines may be accentuated by layer upon layer of thatch having been added over a long period of time, in some cases centuries, ending up with a total thickness often several feet thick. Water reed, on the other hand, is traditionally laid on bare timber with all the old thatch first being removed and therefore it more precisely follows the line of the roof structure, thus portraying flat surfaces and more acute angles to hips and valleys (see Ill. 4).

Is there wire mesh over the whole roof, on the ridge, or none at all? It is unusual for water reed, particularly in the first half of its life to have wire mesh covering the weathering coat, although one may frequently find the ridge wired only. This is because reed contains no seeds and therefore does not attract birds looking for food. Combed wheat reed, however, does contain seeds, and in Cambridgeshire is always wired completely, although, for some unknown reason,

Illustration 3 - Wheat straw thatch on 14 High Street, North (Ba 13)

Illustration 4 - Water reed thatch on the roof of the Great Barn at Wimpole (Wm 01) combed wheat reed in the West of England is rarely covered with wire. For a similar reason, long wheat straw in Cambridgeshire always has a protective coating of wire mesh (see Ill. 5).

Is the ridge 'block cut' and 'patterned' or 'flush'? Water reed is normally finished with a block cut-ridge, decoratively patterned with spars (see Ill. 6), whereas both long wheat straw and combed wheat reed can be finished with either a block-cut or flush ridge (see Ill. 7).

Is there an exposed 'ligger' (a spar of hazel or willow) running along the line of the eaves, vertically up the gable, or around the hips? Only long wheat straw requires an exposed ligger, or cross spar pattern at the eaves and along the gables (see Ill. 8) to hold it in position. Thus any thatch without exposed liggers is normally combed wheat reed or water reed. But beware of the exceptions. Maybe the owner demanded a ligger or possibly the roof was extended in combed wheat reed and a pattern was fixed to match the original long wheat straw (see Ill. 9).

The example of the Dodson family is a case in point. Malcolm Dodson specializes in long wheat straw, Dodson Brothers in combed wheat reed and water reed. Unusually, they lay combed wheat reed using decorative liggers, which traditionally are used with long wheat straw to hold it down, thus producing what appears to be a hybrid. This can be seen at Foxton in 61 High Street (Fo 08)

Thus already armed with this knowledge and given that answers can be found to the above questions, one can begin to put the pieces together, even when observing a roof from a considerable distance, to determine what the thatch material is for any given roof. The next series of questions one must ask can only be done on closer inspection of the eaves of any given thatch.

Are there only butts visible on the surface of the coat, or can lengths of stems be seen, i.e. some butts down, some ears down? If the surface of the coat exposes only the butts of the thatching material it is either water reed or combed wheat reed (see Ill. 10), because the preparation method of long wheat straw does not differentiate between heads and butts. Therefore, if it is of

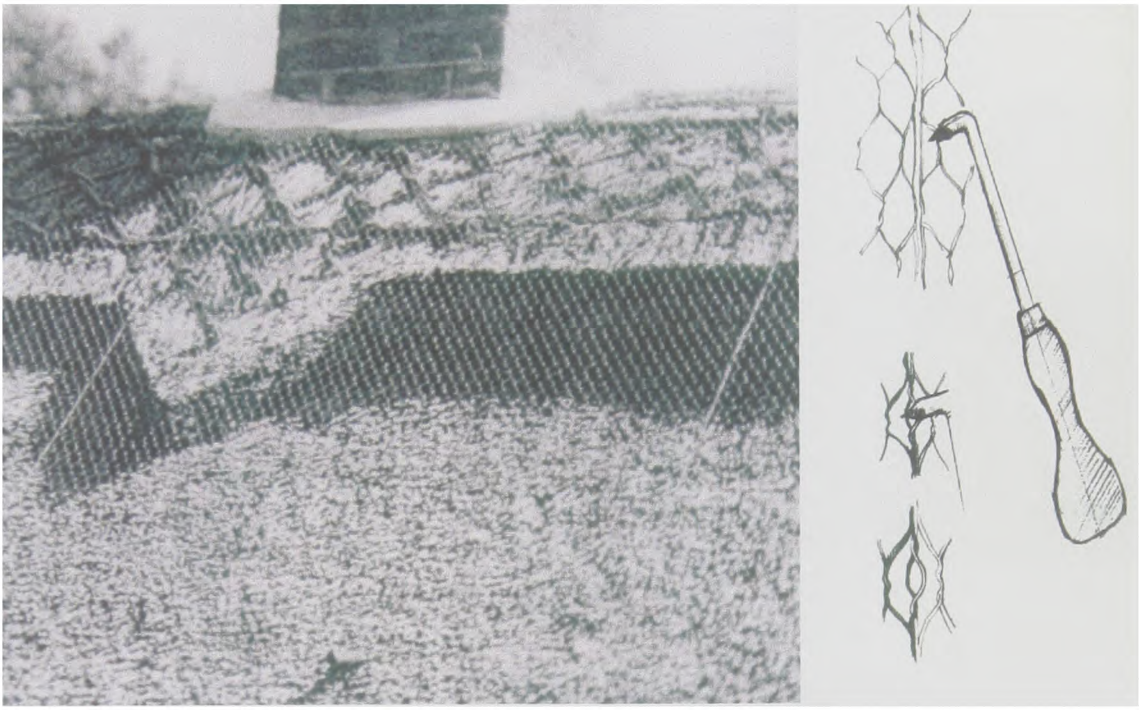


Illustration 5 - Wire mesh and (insert) tool used to apply it

Illustration 6 - Block cut ridge in water reed at Riddy Lane, Bourne (Bo 01).

Illustration 7 - Block cut ridge in long wheat straw at 41 Whitecroft Road,
Meldreth (Me 02)

Illustration 8 - Exposed liggers to the eaves and cheek of the eyebrow window at
41 Whitecroft Road, Meldreth (Me 02)

Illustration 9 - Liggers on a long wheat straw roof, extended in combed wheat reed

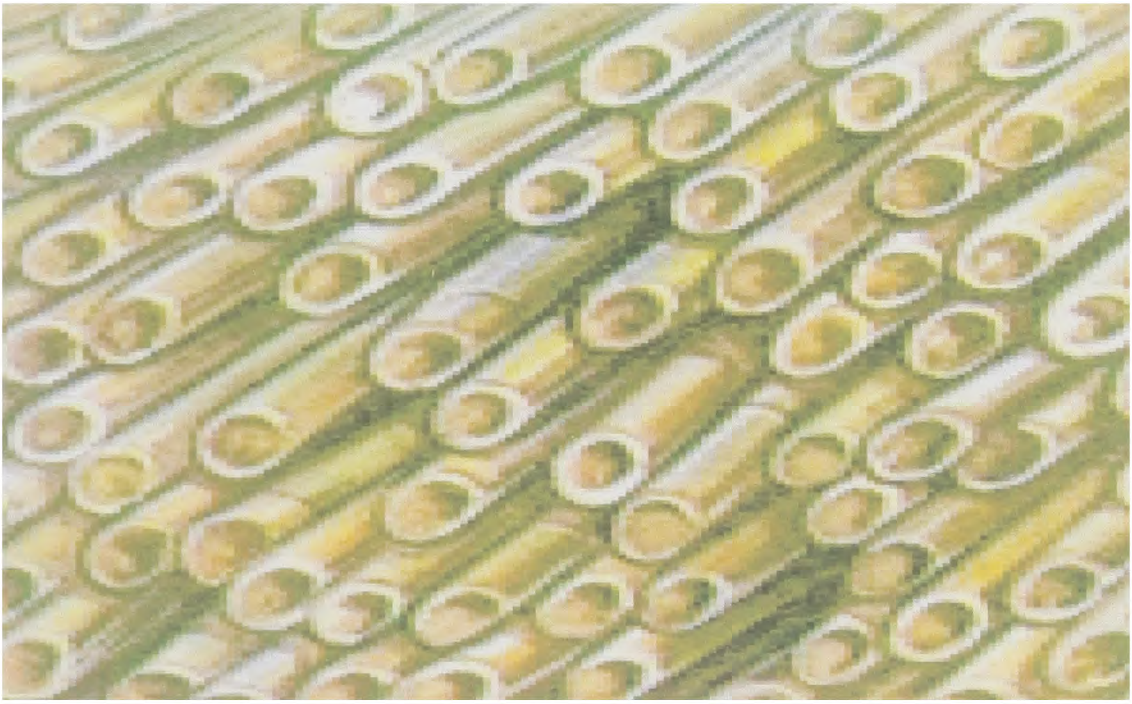


Illustration 10 - Surface of combed wheat reed thatch demonstrating how only the butt ends show coarser texture with both butts and ears showing it must be long wheat straw (see Ill. 11).

Have the eaves line and gable barges been cut to shape? This leaves the individual butt ends clearly cut at 45 degrees, a practice that is reserved for long wheat straw and combed wheat reed (see Ill. 12). Or are the butt ends still cut at right angles to the stems? This shows that the thatch is uncut but instead has been dressed or pushed into shape, a practice that is normally reserved for water reed. Water reed, being so much stiffer and stronger than straw, can be dressed, beaten or pushed to shape under the eaves and barge, and therefore the butt ends will still show the original square cut made when the reed was harvested (see Ill. 13). Again there are exceptions. Occasionally you will see a thatcher dress the eaves or gable of combed wheat reed rather than cut them to make the roof resemble a roof of water reed, but this is not generally accepted practice.

If there is exposed timber on the surface of the eaves, has the thatch tended to open where the spars penetrate? Generally, there are two different methods of closing the eaves between the thatch and the top of the wall so that birds cannot penetrate at this junction. The method employed depends on the relationship between the foot of the rafter and the top of the wall. If the rafters terminate flush with the wall, the thatch can itself close the gap, and this is normal with long wheat straw. If the rafters oversail the wall, which generally indicates a roof to be thatched in water reed, the gap between rafter and wall is usually closed with timber boards. Either method can be found on a roof to be thatched in combed wheat reed, by its nature a hybrid material. Should there be exposed liggers or cross spar work at the eaves of a roof thatched in combed wheat reed or water reed, the spars will tend to open the coat where they penetrate it. This will show after a few years as dark lines under the eaves where water has consequently been able to penetrate.

What are the colour and the texture of the thatch under the eaves where it has been totally protected from the elements? Straw when new is a bright golden yellow and in unexposed places will retain a certain amount of its colour for some years. When either exposed to daylight (in essence ultra-violet light) or dampened with water it will tend lose its colour and become

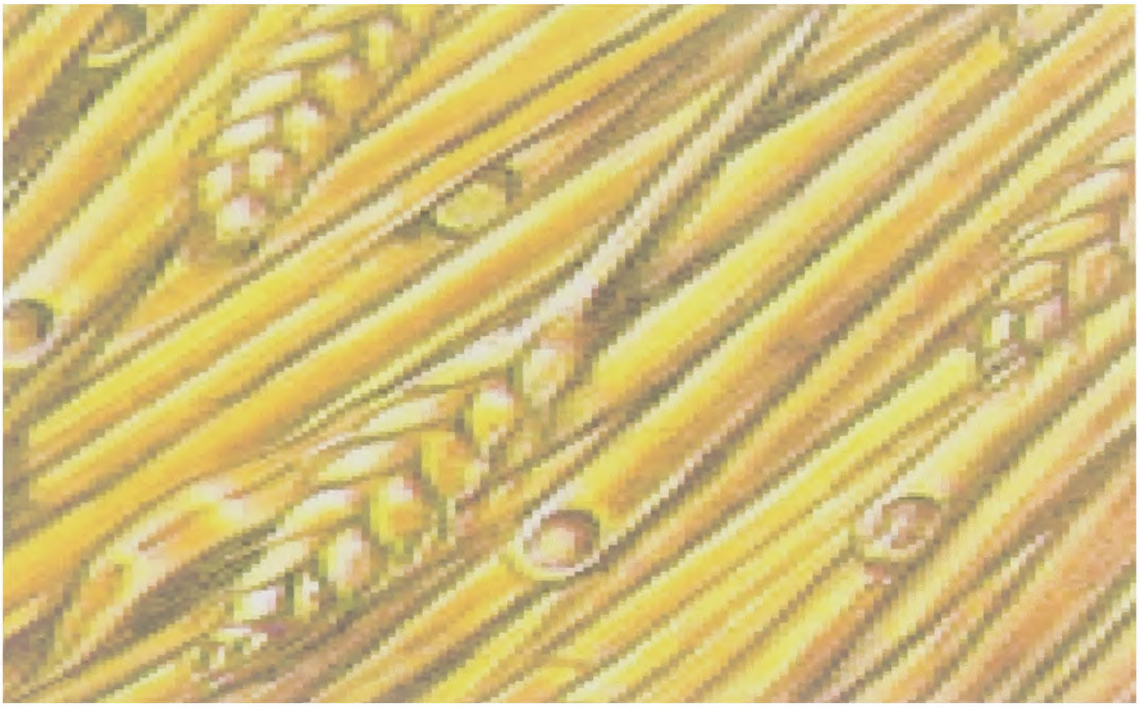


Illustration 11 - Surface of long wheat straw thatch showing characteristic mixture of butts and ears

Illustration 12 - Long wheat straw roof with eaves being cut to shape (centre and left of ladder), with waste straw still in place before being trimmed off

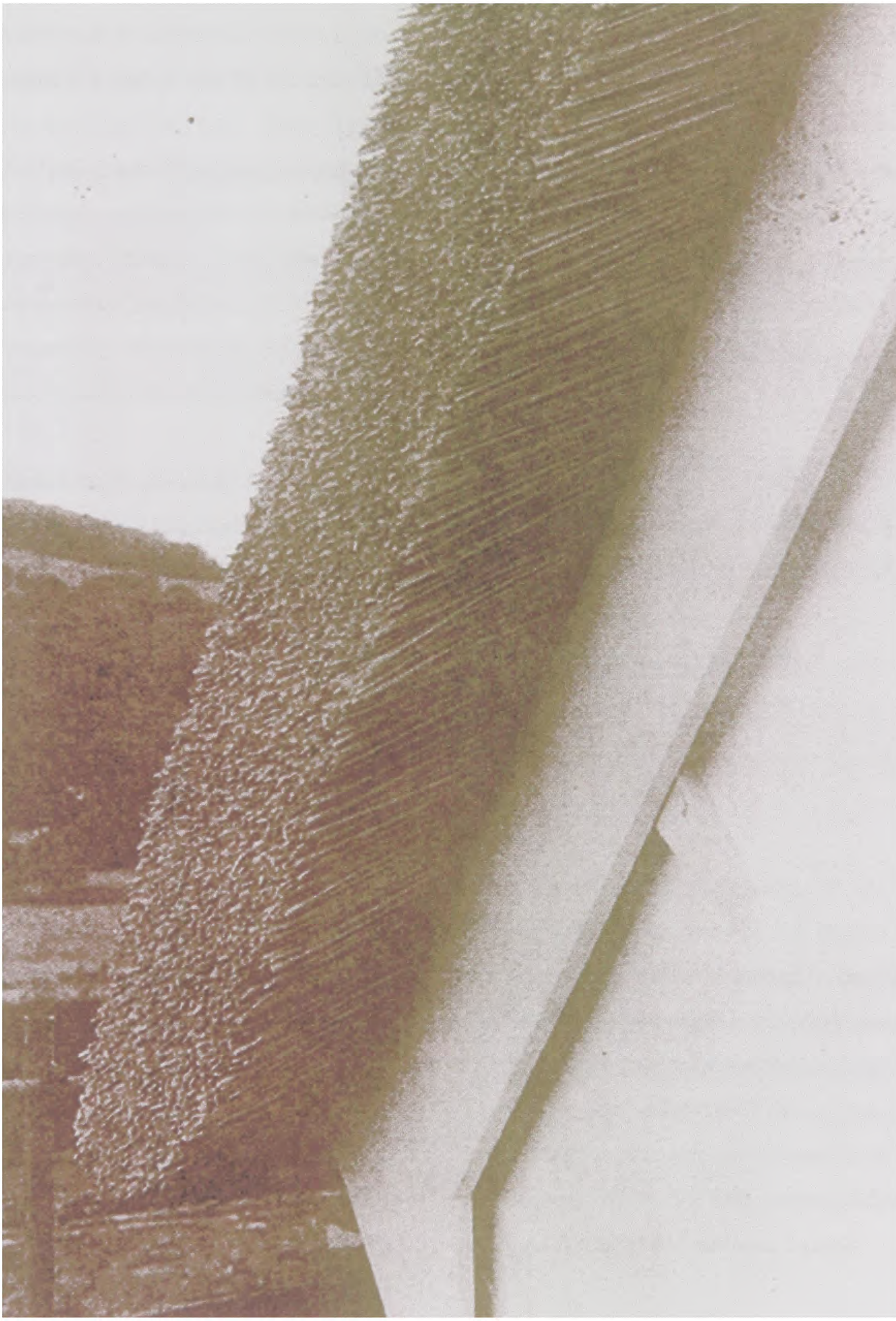


Illustration 13 - Water reed thatch, showing eaves and barge dressed into position pale grey. Exposure to the damp also causes it to become flexible and bend without splintering. Water reed, by contrast, is darker in colour and less malleable, and it looses its colour, whether exposed or unexposed, far less quickly, owing to its greater durability.

The final test for determining what material is used is to pull, gently and carefully, one piece of the thatch out from either under the eaves or the face of the weathering coat for closer inspection. Damage is avoided in this way to the thatch covering, particularly if it can be done without climbing on the roof. Positive identification of the thatch material can then be made. In the case of winter wheat used for thatching the stems are usually hollow, although there are some solid-stemmed varieties of wheat, such as Capelle.

There is no single positive test that can be applied alone and there are exceptions to every rule and to almost every thatched roof; however, if the guidelines are followed, correct identification can be readily made. Once this major hurdle is overcome it is easier to quantify such things as how long the thatch has been on the roof and how long it is likely to last before it needs maintaining in the form of patching, re-ridging, replacing or covering with wire.

Life Expectancy and Natural Deterioration of Thatch

The detailed causes of deterioration in thatch will be discussed later (see Chapter 6), but, in general terms, thatch decays as a consequence of suffering from the weather. The largest single reason for decay is directly related to the length of time that moisture is retained on the surface of the weathering coat. Microbiological activity takes place in wet warm conditions, causing the thatch material to break down. Thus the drier the climate, the more exposed the roof and the steeper its pitch, the longer the life span of the thatch. Any part of the thatch that is protected from surface water will show little or no sign of deterioration over an extended period. It is fair to say that frequently one finds the original straw base coat, where it is fully protected from the elements, still in perfect condition in the roof spaces of centuries-old cottages located throughout the parishes of Cambridgeshire.

The longevity of thatch appears to vary very greatly from one region to another. This study has examined longevity in Cambridgeshire in great detail and by various means. The general results suggest that in Cambridgeshire a thatched roof, whether it be thatched in wheat straw or water reed, will last longer than anywhere else in Britain. The reasons for this are not entirely clear. Climate, roof construction and the individual abilities of that county's thatchers are likely causes, but tradition may also play a part. A thirty-year lifespan is very common, and a forty-year or even greater lifespan appears to be readily attainable by some thatchers. This may be ascribable to a combination of favourable climate and steeply pitched roofs, as well as the skill of its craftsmen.

However, in Devon the generally accepted lifespan for a roof thatched in combed wheat reed is only between twenty and thirty years (Cox & Thorp 2001, 161-3). On the Isle of Man durability is far less: the weathering coat is replaced every five years. This marked difference cannot be solely due to a wetter climate, the lower pitch of its roofs and unskilled thatchers(see Chapter 6).

The recorded data of forty-two Stanford roofs thatched in long wheat straw (Appendix B, Fig.1) in Cambridgeshire suggest that they may be generally expected to last forty years, but a minimum of ten years has been recorded at Home View Cottage and Home Cottage, High Street, Abington Piggots (Ab 03), and a maximum of 67 years at Norgetts Thatch, High Street, Melbourn (Mb 30). The records for roofs thatched in combed wheat reed are much slighter, ranging from some twenty-five to forty years, and a roof thatched in water reed some forty to eighty years. These figures apply to the weathering coat or main body of the thatch, though with all three materials the thatch may require patching to ensure that it lasts its full life span. All thatched roofs have a ridge, which may be block-cut and patterned, or flush-patterned and either saddled or simply butted-up. The former will last approximately ten to fifteen years, the latter only six to ten years The ridges of a few thatched roofs are known to have lasted for twice as long as these general figures suggest.

To assess the age of thatch, it is again useful to have a check-list of points that are noticeable from a distance. The following is a checklist that research for this thesis has proved to be a reliable means of assessing age.

1. Is the colour of the thatch golden yellow, brown, silvery grey, or black, or are different parts differently coloured?
2. Are the lines of the eaves and ridge straight and sharp?
3. Are the contours of the roof firm and sharp?
4. Can the wire mesh be seen from a distance?
5. Is the wire on the ridge inches higher than the top of the thatch? (see Ill. 14)
6. Are the spars broken or slipping from the ridge or the eaves?
7. Is there any other obvious damage, such as around chimneys, or are there any other signs that might arouse suspicion?

Answers to these questions give an indication of the state of a thatched roof at any given age. These are simply guides and the variations of structure, climate, good or bad materials or quality of thatching should also be taken in consideration. The following characteristics taken from the quoted documented examples provide a basis for judging age, and, in the case of long wheat straw, allow comparatively accurate judgments to be made over an extended period, thanks to the records of two generations of master-thatchers, my father D.D. Stanford (DDS) and my grandfather C.G. Stanford (CGS). In other cases, the dates come from master-thatchers Osbourne, Malcolm Dodson, and Dodson Brothers, and also in two cases from house owners. The base date for these records is 1993, as also is that of my own observations.

Long Wheat Straw

Years 1 - 3

1. The coat will have faded very little, and be reasonably bright in colour, particularly under the eaves and in other unexposed places.

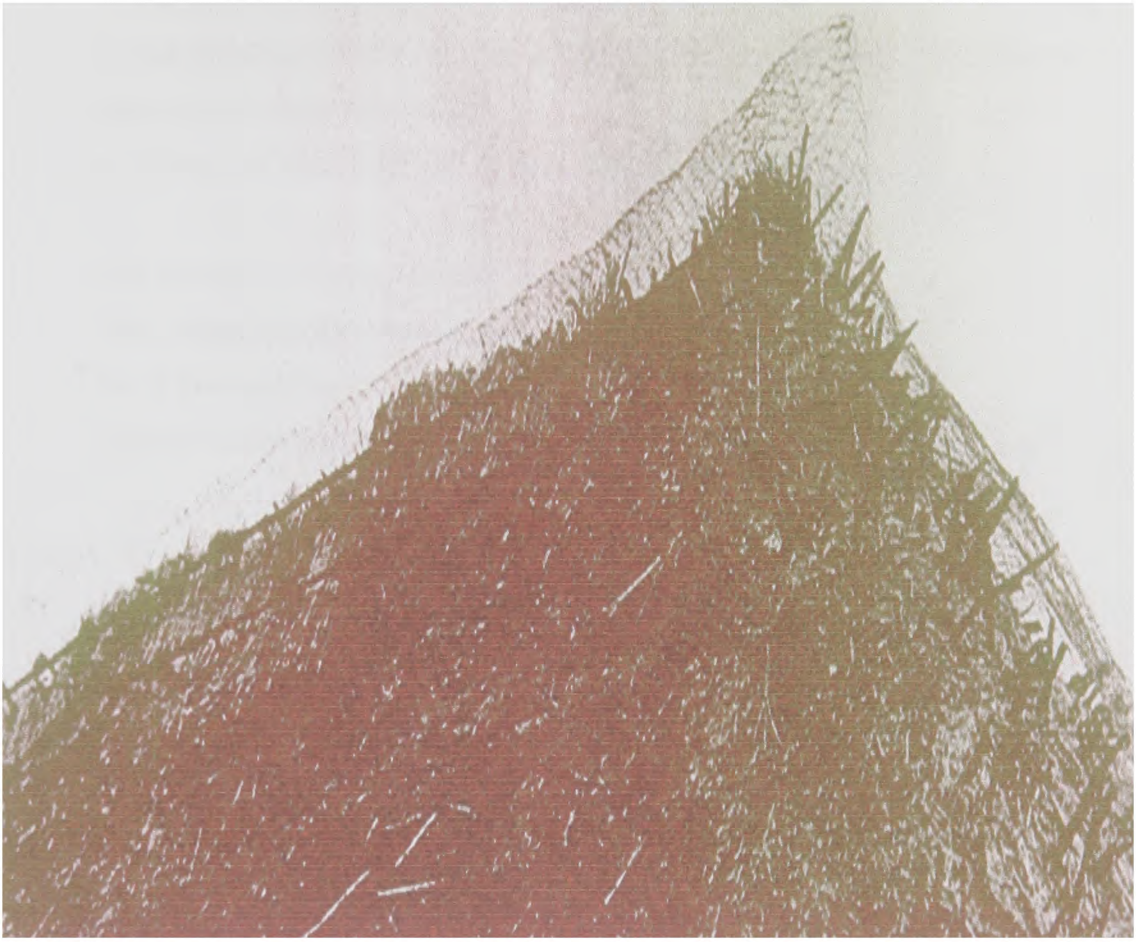


Illustration 14 - A wired ridge, showing worn thatch

2. The geometry of the roof will not be marred by any form of wear or gulleying.

3. The galvanized wire mesh, either 20 or 22 gauge, will remain un-rusted and reasonably visible while still shiny.

4. All exposed spar work will be tight, firm and flush with the coat.

Oak Cottage, Littlington (Li01) - 1 year (DDS)
The Cottage, Ermine Way, Caxton (Cx01) - 1 year (DDS)
No. 8 Ermine Way, Caxton (Cx02) - 1 year (DDS)
Cottage on the Green, Foxton (Fo10) - 3 years (DDS)

Years 4 - 8

1. The thatch will take on a much darker colour, particularly towards the end of the period, but will still be yellow, though not bright, under the eaves. When viewed from under the eaves, a dark line perhaps half an inch wide will be apparent along the outer edge, showing the depth of rainwater penetration.

2. The ridge will be showing the first signs of untidiness towards the end of this period.

3. There should be no change to the contours of the roof.

4. Towards years 4 - 6 of this period, the wire mesh will begun to show signs of rust along the eaves where it was bent into position, and also along the ridge, but generally no further signs of rust will be apparent.

Maplemans Cottage, Smith End, Barley (Bl 08) - 7 years (DDS)
Nos 5 & 7 Church Street, Triplow (Tr 01) - 8 years (DDS)

Years 9 - 12. Although this is a short period, there seems to be the start of a period of drastic change after about a decade of youth.

1. Definite signs of wear begin. Large rusty patches now appear on the surface of the thatch.

2. The ridge will be deteriorating noticeably.

3. Valleys begin to hollow and show signs of wear and there will also be hollowing

adjacent to chimneys.

4. The wire mesh begins to separate at the eaves, where it is now definitely rusty.

5. Cross spars will be slipping from the ridge.

No. 1 Drury Lane, Melbourn (Mb01) - 9 years (DDS)
No. 14 High Street, Barrington (Ba13) - 9 years (DDS)
Orchard Cottage, Barrington (Ba26) - 10 years (DDS)
No. 4 Challis Green, Barrington (Ba08) - 11 years (DDS)
No. 7 Drury Lane, Melbourn (Mb27) - 12 years (DDS)

Years 13 - 16. This is the second stage of change between a youthful thatch and the start of old age.

1. The coat will be looking worn but will still have a few more years' wear. Dark patches start appearing under the eaves.

2. The ridge will either obviously need renewing or be neat and tidy showing that it has recently been replaced.

3. There may be patching in the valleys and gullies by chimneys.

4. The wire mesh may be completely worn out and rotted, or fairly shiny and therefore renewed recently.

5. The cross spar pattern at the eaves and gables will have almost totally disintegrated or have been replaced and look obviously new.

No 46 Barton Road, Hastingfield (Ha01) - 13 years (DDS)
Museum Cottage, 77 Frog End, Shepreth (Sh17) - 14 years (DDS)
No. 18 Station Road, Foxton (Fo09) - 14 years. (DDS. This cottage was previously thatched in 1921 by CGS, giving a 58-year interval between re-thatches, the longest period recorded in this text)
No.70 Bridge Street, Whaddon (Wd06) - 14 years (DDS)
Wheelrights, High Street, Barley (Bl 03) - 15 years (DDS. Thatched by CGS 56 years beforehand in 1923)

No. 21 Ermine Way, Arrington (Ar02) - 15 years (DDS)
No. 11-13 Mortimers Lane, Foxton (Fo07) - 16 years (DDS)

Years 17 - 30 From now on it is very hard to gauge the age of a thatched roof with any accuracy as too many variables such as location, orientation, and the quality of the thatcher's work and the original materials all affect longevity to various degrees.

1. There may now be definite signs of deterioration in the coat and odd patching could be necessary to extend its life. The original fixings applied to the courses of the straw will possibly be showing on the surface. This is a sure sign that the thatch is nearing the end of its reasonable and useful life.

No. 18 High Street, Barrington (Ba14) - 17 years (DDS)
No. 3 Mortimers Lane, Foxton (Fo11) - 18 years (DDS)
Rose Cottage, Norgetts Lane, Melbourn (Mb30) - 47 years (CGS)

Combed wheat reed

Years 1 - 3

1. As for long wheat straw.

Years 4 - 10

1. As for long wheat straw.

Cottage north of the Manse, High Street, Castle Camps (Cc06) - 10 years (Date from owner, thatcher unknown)

Years 11 - 15

1. There will be no particular signs of wear on the exterior surface of the thatch. Under the eaves a dark line caused by rainwater penetration will possibly be apparent,

approximately 25 mm (1 in.) wide, located on the outside edge.

2. The ridge will obviously be in need of replacement, or will have been recently renewed.

3. The wire mesh will have separated at the eaves and will be rusting all over its general surface, or will have been newly replaced and be fairly bright.

Clark's Cottage, Green End, Landbeach (La10) - 15 years (Date from owner, thatcher unknown)

Years 16 - 28

1. The protected area under the eaves will no longer be yellow but dark and dusty in colour.

2. The ridge will have been replaced under normal circumstances towards the second half of this period and will once again be showing signs of wear.

3. Valleys and areas around the chimney may need patching.

4. The thatch will have been rewired during this period and the wire mesh will have started to deteriorate again at the same rate as before.

Nos 9 and 11 (Willow Way Cottages), North End, Meldreth (Me17) - 20 years (Osbourne)

No. 109 High Street, Great Abington (Ga01) - 20 years (Dodson Brothers. In this particular and highly unusual case the combed wheat reed was applied using the method of spar coating, thus leaving a base coat of thrashing waste which, remarkably, has evidence of smoke blackening preserved on its underside)

Years 29 - 40

As with long wheat straw, if the original fixings are visible on the surface of the coat, the thatch is virtually at the end of its useful life. Patching will be required towards the end of this period to maintain weatherproofing. The re-ridging and rewiring should still be wearing reasonably well and may outlast the main weathering coat.

Water reed

Years 1 - 12

1. The colour of water reed is darker than that of long wheat straw thatch and therefore the changes are slower and more subtle. Even during the period when the coat is quite dark, the colour of the butts under the eaves will not have changed greatly.
2. The ridge will need replacing towards the end of this period and it is here alone that apparent signs of wear will allow a reasonably accurate date to be determined.
3. In general the thatch will appear firm and tight, the original lines will still be in evidence and will remain so throughout this period.
4. The main roof area of water reed is not usually covered during this period with galvanised wire mesh, so there is no rusting of the mesh to aid the dating process. There are, however, exceptions to every rule and I have seen more and more re-thatched water reed roofs that have been completely wired as part of the re-thatching process, presumably to stop birds from stealing it for nesting materials.

Years 13 - 28

1. Though there will be no obvious change in condition, the coat will darken, even under the eaves and the original colour of the reed can only be seen by removal of a stem from the roof material. The butts on the face of the coat will be brittle to touch and easily broken.
2. The ridge will need replacing again towards the end of this period.

Barn at Priory Farm, Haverhill Road, Shudy Camps (Sc02) - 15 years (Osbourne)
Spindle Beams Cottage, The Endway, Camps End, Castle Camps (Cc02) - 20 years (Dodson)
The Grove, Shingay-cum-Wendy (Sw03) - 20 years (Dodson)

Years 29 - 40

1. The coat will be quite black, although the stem colour is unchanged 50-60 mm (2-3 ins) from the surface. The exposed butts are now very brittle.

2. Re-ridging will be necessary towards the end of this period.

3. The contours of the roof should still appear totally sound, as deterioration is relatively slow with only subtle changes. There is probably no need yet for patching, even in the valleys or below the chimneys, although the darker areas under the eaves will indicate clearly where future work will be required.

4. All slopes may be covered in galvanised wire mesh (wire mesh is usually replaced at the same time as the roof is re-ridged).

Park Cottage, Carlton Green Road, Carlton-cum-Willingham (Ca04) - 30 years (Dodson)

Years 41 - 60 plus

1. At this stage, if one piece of reed is removed the colour, with the exception of the exposed end, will be still similar to that of when it was laid.

2. The eaves will have become ragged.

3. The coat may show signs of unevenness, and slippage in some areas will need attention. The valleys and below the chimneys will need attention to maintain the useful life of the thatch. At approximately 40-45 years one or two marks may appear between the courses, showing that these have started to separate. This is the first major change in the roof and will give a reasonably accurate guide for dating purposes. At a later stage fixings will become exposed to the elements as the coat wears down, but it should still be possible to repair and patch it so as to extract a few more years of life before a major re-thatch is necessary.

It will be clear that these guidelines will be qualified by the particular circumstances pertaining to each individual roof. Conclusions must not be drawn too quickly, and one must ensure that there are two or more reasons to justify any estimate of age. It is always worth bearing in mind that there are outside influences on wear, these being geographical location, angle of the roof pitch, overhanging trees, moss and lichen growths, and a north or south facing aspect, all of which may contribute to deterioration both on the surface and under the eaves, in the valleys and beside and below chimneys. Layers of moss or pine needles may also form on the weathering surface of the thatch. Although the roof surface may appear sound the thatch hidden underneath is likely to be damp and consequently deteriorating, and may even be full of hidden gullies showing advanced deterioration.

Another variable is the thickness of the coat, as this also determines age. The thicker the coat, the greater is the angle between it and the underlying rafter. So, for any given pitch of rafter, the actual pitch of the reed will be reduced to some extent, depending on its thickness (see Ill. 15). It is possible to get an indication of depth of coat with either combed wheat reed or water reed by the length of the butt visible on the surface. An approximation can be made of the depth of thatch: if only 25 mm (1 in) or less of the butts is visible the coat will be 300-380 mm (1.0-1.25 ft) thick; 40-50 mm (up to 2 ins) visible, the coat will be 230-300 mm (9-12 ins) thick, and if 100-130 mm (4-5 ins) visible, the coat will be very thin, probably 150 mm (6 ins) or less. The optimum thickness of the coat is 230-300 mm (9-12 ins). This is because thinner work, although it lies at a steeper pitch and therefore sheds rain more quickly, provides less covering for the fixings and leaves a lot of the stem of the raw material unprotected on the surface, whereas a 480 mm (19 ins) coat may offer more protection to the fixings but it lies at a slacker pitch and therefore wears more quickly than a coat of 230-300 mm (9-12 ins).

If galvanised wire mesh is covering the thatch, check the rusting and discoloration carefully as this can give a very clear indication of the length of time the wire and possibly the ridge have been in place.

Be wary of thatch that has been smartened up, perhaps to encourage potential purchasers. Minor

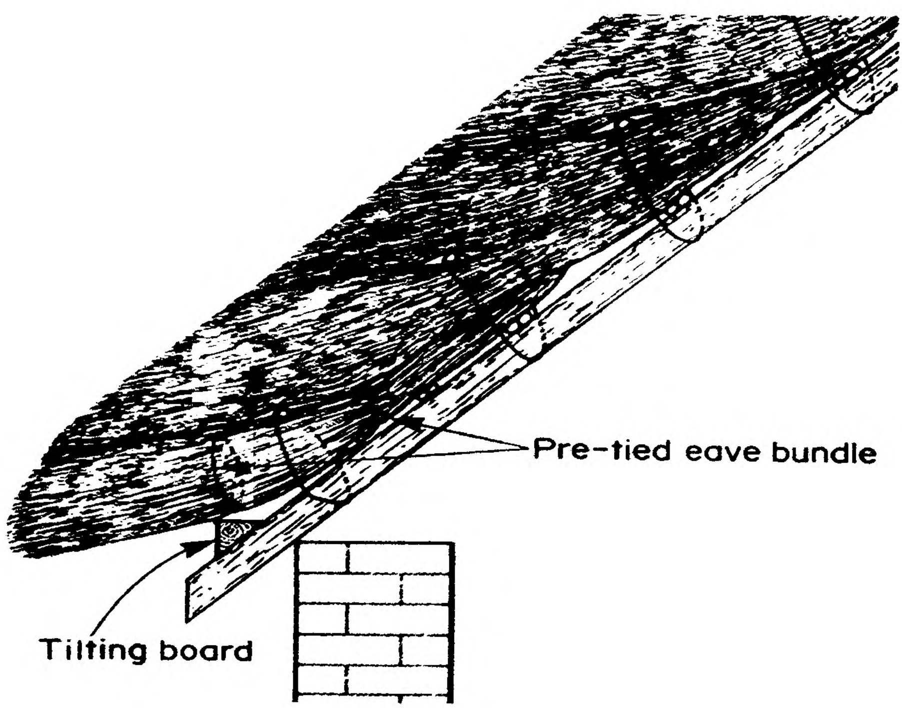


Illustration 15 - Water reed thatch being laid, and (below) diagram of how bundles of water reed relate to pitch of rafters repairs, though they may have only a short-term effect, can to some extent disguise the true age and condition of the roof.

Having established the age of the thatch one can roughly estimate how long the thatch may last. To do so exactly, however, is practically impossible. All that can be said is that a particular material has a life expectancy of a number of years in a certain geographical location. It may be necessary to patch it from time to time to allow the thatch to last for the maximum period.

When assessing a thatched roof one must be critical within reason and remember that thatch is a natural material. There are no measuring devices, so these assessments must be carried out by using eyes and experience, remembering that minor variations in the overall shape and appearance of a thatched roof are inevitable and will not affect the life expectancy of the thatch. The quality of the thatch, however, will affect its life expectancy.

If one judges the quality of a thatched roof against a scale from 1 to 10, 10 being perfection and unobtainable, a top score of 9 is a realistic measure of the best. To take a few examples: course marks or lines across the roof particularly noticeable within the first five years of thatching would lose perhaps half a point at the top of the scale, though they certainly will not shorten the life of the thatch; a variation of 20-50 mm (1-2 ins) over 3 m (10 ft) on the gable would again lose half a point; a hollow area in the surface of the coat in a straight piece of the thatch may lose half a point and so on. The nearer the work approaches the bottom end of the scale, the more obvious it is that irregularities are present.

There is a great variation in thatching standards. Not all roofs attain 9 on this scale, nor can such a quality be reasonably expected in every situation. Obviously the price paid will be reflected in the end result. If a roof is thatched cheaply, inevitably it will not last as long as one thatched more expensively, but this does not necessarily imply poor workmanship or finish.

With a reasonably reliable means of judging the age of a thatched roof thus established, this was applied as part of the detailed survey of just over three hundred thatched roofs in

Cambridgeshire so that a general picture of their age and condition could be determined. The same process, rather less accurately, was also applied to a further seventy photographs of identifiable buildings held in county and national archives. These photographs cover the period from the 1890s to the 1950s, thus extending the record backwards from 1993 by a century. This made it possible to reach a general conclusion about the longevity of particularly long wheat straw thatch in Cambridgeshire, and to compare this with figures for longevity obtained in other regions. This will be discussed in Chapter 6.

Chapter 3 - Roofs

Many roofs of traditional buildings were thatched in the first instance. These traditions varied to a great extent from region to region. Variations in shape and methods of thatching are still readily visible. Pitch and general form, the prevalence of obstacles or the lack of them, and the means of fixing the thatch are just some of the distinguishing features that define a region's thatched buildings. It is well known that the thatched roofs of the Hebridean 'Black Houses' are low-pitched, hipped in form, have no intruding obstacles such as chimneys or dormer windows, are made of rough beams and spars, roped together, and the thatch, which may be of straw, fern root or heather, overlies a base of turf and is held in place against the strong winds of the region by rope nets attached to stone weights. Elsewhere in Scotland, the thatching material was sometimes heavily impregnated with mud or clay as a substitute for the rope fastening (Fenton & Walker 1981, 66-7).

These characteristics may be a response to climate, local materials, and the general poverty of the region. Nevertheless it is almost certain that cultural factors are also important. The thatched roofs of Devon are once again low-pitched and often hipped, but they have intruding chimney-stacks and dormers, and are made of straw which is pegged and tied in place over a base layer, again of straw. Clearly different cultural factors are involved, but the climate is different, the region is wealthier, and wheat straw is readily available.

Almost exactly half way between these two extremes on the west side of Britain lies the Isle of Man. Its thatched roofs are very similar to those of the Hebrides: they are low-pitched and often hipped, have no intruding chimneys or dormers, and the wheat straw is laid on a base coat of peat and turf and held in place by a rope net which is fastened all round the roof, not to stone weights but to protruding stone cleats (pers. com. Anthony Quiney). The similarity to the Hebridean roof is striking, and, apart from the reliance on readily available wheat straw, the differences are mainly of detail. At first sight, this suggests a similar response to similar island climates. However, the climate of the Isle of Man is very similar to that of Devon. It is as sunny, as warm and no wetter, while the Hebrides are far less sunny and generally colder, especially in the summer, as well as being rather wetter. So far as wealth is concerned, the Hebridean crofter has always been notably poor, whereas the Isle of Man farming community more closely resembles the poorer element of its upland Devon counterpart. In short, it appears that culture is playing the key role. The Manxman has strong cultural links with the Hebrides, through a common Celtic and Norse ancestry, but few with Devon, where Anglo-Saxon and Norman influences dominate the native culture. This is likely to be the reason why Manx roofs generally follow the Hebridean pattern even though the Devon pattern might serve equally well. The lesser variations may well be explained by local conditions.

Indeed local conditions – climate, economy, culture – all play a part, and, given the extraordinary closeness and secretive nature of thatchers, even today, it is no wonder that the practice of thatching differs so markedly from one region to the next, but only a little with the passage of time. This is the essence of those qualities that define vernacular architecture (Mercer 1975, 1-3).

While most buildings in Cambridgeshire were perhaps once thatched, the majority of buildings with soundly built roofs are now finished with slates or clay tiles. There are no thatched buildings in Cambridgeshire's towns. In general thatch is confined to villages and to more poorly constructed houses even there, although a few larger and even medieval houses still retain thatched roofs (RCHME 1968, Barrington [20]; RCHME 1972 - none). Some of the smaller, more recent houses were designed for slate or tile from the start, but at least until the late seventeenth century, thatch was the immediate choice of roofing material where status was not an issue, and was a necessary choice if the roof was roughly and irregularly constructed. This is immediately apparent in the village of Foxton (Parker 1975), whose occupants were small-holding farmers and so poor in the sixteenth and seventeenth centuries that they could only afford to thatch their two-roomed houses. The roofs of their houses were irregular: tile was therefore out of the question. The homes of poor cottagers throughout the county were similar or even smaller versions of these, and they too were invariably thatched.

The larger houses were tiled, even in the late Middle Ages, and by the late seventeenth century tile had descended to houses below manorial status. From the middle of the nineteenth century the railway network allowed the cheap importation into Cambridgeshire of slate, and this material found its way on to the roofs of cheap houses intended for all classes from labourer upwards (see Chapter 1). These nevertheless had to have regularly constructed roofs that provided an even surface on which to lay slate or tile. This posed no problem to the builders of estate cottages, as it had to the county's peasantry. But luckily, thatch never has required this regularity.

Indeed, older, poorer houses in Cambridgeshire have roughly built roofs characterised by a steep pitch, fifty to fifty-five degrees being the norm, and simple form. Steeply pitched roofs are common in medieval houses in eastern and south-eastern England, and remained so wherever thatch continued to be used, for instance in the Banbury region of the Midlands (Wood-Jones 1963, chapters 4 and 5). This pitch remained the norm in Cambridgeshire until well into the eighteenth and even nineteenth centuries, when roofs were still thatched. Lower pitches, where they occur, invariably result from an intention to cover the roof with either pantiles or slates. In fact only one thatched roof with a pitch below fifty degrees was noted during the survey, this being Mulberry Cottage, Cottenham (Co 08), which has a pitch of forty-five degrees.

Most roofs are simply gabled, hipped roofs being far less common. When 286 thatched buildings were examined in detail during the survey, it was found that 559 gables terminated their main roofs, but only 33 hips. Where hips are found, they tend to be in the form of half-hips. These usually incorporate a window below the half hip, which provides light for the garret in the roof space. Because of their fairly small size, many houses have extensions in the form of wings, either as original features or additions. The roofs of a great number of these are either tiled or slated, and therefore excluded from these totals, but a few are thatched, and these complicated the roofs by introducing valleys. Dormer windows, excluded from these numbers, were found to be mostly gabled, and these, likewise, introduced valleys.

Parapets are unknown among Cambridgeshire's thatched buildings, almost certainly because they are either timber-framed or built of clunch (cut chalk blocks), and this includes their gables as well as their eaves. These are, of course, generally modest houses. By distinction, the sixteenth- and seventeenth-century stone houses of the midlands may have both thatched roofs and gables, finished with parapets, probably because fashion and status required it (e.g. Wood-Jones 1963, chapter 5).

Medieval houses usually incorporated an open hall, characterised by an open hearth. The Royal Commission on Historical Monuments for England lists five such houses in north-east Cambridgeshire (RCHME 1972, xlv), and about sixteen in west Cambridgeshire (RCHME 1968, xlvi-xlviii). The smoke simply rose into the roof space, where, over the years, it deposited a layer of soot on the roof rafters and the underside of the base coat of the thatch. While the medieval Cambridgeshire house had an open hearth, by the seventeenth century these were set under hoods and eventually within brick chimney-stacks, thus introducing another feature to the roof line. Most Cambridgeshire houses have their chimney-stacks mounted axially on the ridge, and are arranged internally so as to rise between two rooms. Occasionally they are set lower in the roof, and, when they are built as additions to pre-existing houses or are of the later nineteenth or twentieth centuries, may rise from an external wall. Some of these were external bread ovens, which have been converted to conventional internal hearths, using the existing flue.

The survey undertaken in 1993 as part of the research showed that every one of the 312 thatched houses had at least one chimney-stack, and a few had two or more. Of these, 222 houses (or nearly three quarters) had a stack placed axially on the roof ridge, 78 houses had one placed over an external wall, but not at the ridge, and a further twelve were in various other positions. The axial position on the ridge is typical of eastern and south-eastern England, as well as Cambridgeshire, and probably originated when stacks were inserted into timber-framed open halls, and then became traditional in newly built houses. This position has several advantages: it does not interfere with the timber frame, and the stack could have hearths on opposing faces, thus providing heating for two adjacent rooms on each storey. This efficiency was matched by the utility of its placing, where it only interfered with a few rafters, and these could be readily supported against the side of the stack; moreover there were no gullies against any of the four faces of the stack. This latter feature is of particular significance to a thatched roof, since a coat of thatch can readily be made to rise against the base and sides of an axial stack, and there are no gutters that would particularly threaten rain penetration if special precautions against it were not employed.

Nevertheless, 78 houses (about a quarter of the total) had stacks built up from the perimeter of an external wall away from the ridge, and these were invariably not on framed houses but ones with brick walls. Most of these do need a gutter on their upper junction between stack and thatch. This disadvantage was probably not considered at the time the stack was built, or was seen as of less importance than the efficient use of the brick wall as a mounting for the stack. In some cases the position of the stack was predetermined by the specific need to place the hearth against an external wall.

Most small Cambridgeshire houses were only of one storey, but the introduction of an upper storey in the form of a garret, which was increasingly possible when chimney-stacks had replaced open hearths, required new upper windows, These were nearly always in the form of dormers set over the eaves, but occasionally inset within the slope of the roof. When new dormer windows were added to pre-existing roofs, there were invariably gabled, because this was readily achieved by cutting out a few rafters. The construction of an eyebrow window, although apparently simpler, required the adaptation of several adjacent rafters as well, and this was seldom thought to be worth undertaking.

This seems to be verified in the data gathered during the survey carried out in 1993. This revealed that in the twenty-four parishes surveyed, 225 of the 312 thatched houses (72%) had dormer windows of some form or other, most of the houses in fact having two or more dormers. These were all designed to light upper storeys that took the form of garrets set partly within the roof space, rather than lofts set over an upper floor. This seems to confirm the relationship between thatched houses within the county and fairly low, cottage status. Interestingly, none of the houses that retain smoke-blackened thatch have dormer windows, even though they all have upper floors inserted into their former open halls. This suggests that these houses were always of comparatively high status, and tall enough for an upper floor to be accommodated within their walls without the need to penetrate the roof space. Barrington has nine thatched houses that lack dormer windows, this perhaps reflecting the comparative wealth and high status of the majority of its houses.

Nearly twice as many of the dormer windows are gabled rather than having eyebrow form, there being 340 gabled dormers but only 181 eyebrows. As noted above, the construction of a gabled dormer window, when it is inserted into an already existing roof, requires less interference with the roof rafters than the construction of an eyebrow, so the gabled form is probably a more likely choice for the carpenter, even though the thatcher, who follows, has a somewhat harder task to thatch the junctions than he would have sweeping the thatch over the gentle rise and fall of an eyebrow. These figures, therefore, perhaps may be interpreted as evidence for the large number of inserted floors in originally low, single-storeyed cottages that make use of the roof space. It is also possible that the bulk of the eyebrows may be original features. This was not ascertained during the research, but it is also possible that some may result from carpenters who understood the problems of thatching and, in any case, liked the picturesque form. A further ninety dormers, were neither gabled nor of eyebrow form, and really only indicate the variety of the carpenters' techniques. At all events these have no special significance to the thatcher.

It is widely believed that these small dwellings were built from local materials by their occupants using their own skills and labour to fulfil a need for shelter and with little concern for luxury and status (Brown 1979, 19-22). Despite this, there is a good case for peasants of even modest means employing craftsmen to erect the frames of their houses and to thatch them with reed or other materials (Dyer 1986). If this is so, it follows that thatching must have been not simply a process that any peasant could turn his hand to for his own benefit, but one that was best undertaken by a trained craftsman. While it is a matter of common recollection that poor men thatched their own dwellings, they seem to have learnt their skills from craftsmen, and practised them for a wage whenever occasion demanded.

By the middle of the seventeenth century a large portion of the housing stock of southern England, Cambridgeshire included, had either been rebuilt using higher quality materials, or been considerably extended and altered. While thatch on buildings with well-built roofs was often replaced with higher status stone, slate, or, generally in Cambridgeshire, with clay tiles, depending on availability, less robust roofs continued to be 'spar-coated' (see Glossary) with a layer of fresh thatch when the external coat showed signs of wear, and in most cases was so worn out that the roof was starting to leak. A few of these roofs were medieval in origin. It is this process of spar-coating a long wheat straw roof and thus retaining the fleeking and base layers over a long period of time that has led to the survival of smoke-blackened thatch.

Many small cottages survive in Cambridgeshire that are so roughly built that they suggest that only the poorest craftsmanship went into their construction. Their roofs are constructed from inexpensive local materials, using coppice poles, wattle or brush wood when squared timber was unavailable. Such roofs were not strong or regular enough to support tiles, so straw thatch was an unavoidable choice. Moreover it was cheap, and water reed was either expensive or unavailable. In a roof that was designed to be thatched in long wheat straw, a dormer window would normally be constructed so as to be thatched as an eyebrow. In both combed wheat reed and water reed, a dormer would be constructed in a far more regular manner with built-up side walls, and the thatch would follow these lines tightly, but, as with all generalisations, exceptions do occur.

For example Oak Cottage at Littlington (Li 01), a cottage tied to a manorial farm, has a roof whose rafters comprise timber poles, crossed over each other at the ridge, to carry a ridge-tree, similarly formed from an unsquared pole. This roof has adequately supported long wheat straw thatch for five centuries, but is too uneven for tile or slate, and so has never been converted to either of these materials, nor in fact could be. Moreover, all the constructional evidence of this house suggests that it was first built as a late medieval hall-house, complete with open hall and cross-passage, and was later modified by the introduction of a smoke bay and, later still, given a chimney-stack and its open hall was floored over. Despite its somewhat grand origin, the house fell in status and was subdivided into five tied cottages. If nothing else, this saved its thatched roof, together with its smoke-blackened base layer. These went unrecognised until discovered in 1994 during the present survey. Although this particular roof is unusually ancient, such roofs, it turns out, are not rarities within the county, and fresh surveys to date show that they amount to nineteen roofs out of a sample of around some three hundred for which at least partial access was granted.

A closer examination of the individual roofs suggests that this re-thatching, at least in recent times, has been done with the same raw material, a conclusion that can be verified by the subtle differences within the actual timber roof structures themselves. For example, the location of rafters and other structural elements, together with their configuration when forming features such as dormer windows, are different for dwellings thatched in long wheat straw from dwellings thatched in water reed or combed wheat reed.

Chapter 4 - THATCHERS IN CAMBRIDGESHIRE

The Thatcher's Craft

Until recently the questionnaire sent out to all the master thatchers working in Cambridgeshire would have been valueless. It was inconceivable that a master thatcher would pass on his secrets or indeed any information at all about his craft to anybody other than his son or chosen trainee. To this day some of the older thatchers still refuse to talk about their knowledge. This even extends to talking about their craft with other thatchers. When twenty-six thatchers were questioned about their craft, a third of them did not reply.

This practice was once very common and can only be interpreted as a form of self-protection. If a master thatcher had a particularly good style or technique, he did not want to give any trade secrets away, thus protecting his earning potential. The master thatcher who trained me - my own father - exemplifies this unwillingness to share the secrets of his craft. He was particularly defensive in this respect:

> ... when I was thatching Wheelrights Barley there was another thatcher down the road he kept coming along during his lunch break, I knew why he tried to find out why my thatch looked so different to his, but I knew how he done his so when I see him coming I put the straw on the same as him. When he buggered off I replaced it my way, after quite a few times of him coming to look he said to me I don't understand I put my straw on the same as you, but Im buggered if I can make my work look like yours, I told him he had never slept with the same man as Myself, My Old Chap taught me that trick, he always said there's a lot of clever ones about, How's That.

(Wheelwrights, at Barley, in Hertfordshire, is close to the Cambridgeshire border, and appears in the Catalogue Raisonné as Bl 03)

Nevertheless, having attained a certain status as a thatcher myself, I was lucky because seventeen of Cambridgeshire's twenty-six master thatchers working in Cambridgeshire did answer my first questionnaire, and a further three my second questionnaire (see Appendix C).

The responses to the questionnaires revealed that the average experience of the individual master thatcher working within the boundaries of the county is 23½ years, the newest master having nine years' experience (S. Bond), the oldest fifty-seven years' (D.D. Stanford). This average is probably meaningless. Far more significant is the more or less equal spread between the newest thatcher and those with about thirty years experience. Recruitment in Cambridgeshire since 1960 seems to have been very steady, with about four thatchers joining every five years. This figure, however, makes no allowance for those thatchers who did not respond to the questionnaire, nor does it account for wastage of thatchers as they retire or otherwise leave the field. The thatcher with by far the longest experience was aged 68 and on the verge of retirement.

The responses show that eight of the thatchers had been trained by their fathers, but all of these had been trained over sixteen years before the questionnaire was sent out (1993), and all but one over twenty-two years beforehand. Interestingly this traditional method was supported by both the oldest thatcher (Stanford) and the newest (Potter), both of whom were of the fifth generation in their families to be trained in this way. The earliest thatcher recorded in their families was at work in the early 1830s. Three generations of Osbournes had also been trained within the family. This family, however, is very unusual. All three members were immigrants from Poland in 1939, and anglicized their name as Osbourne. The eldest member had been a thatcher beforehand in his native country, but, being already past retirement, did not thatch in England. His son continued to practise and handed on his skills to his son, whose work is typical of Cambridgeshire practice, despite his parentage and training. In this, just as in the other cases, the accumulation of a lifetime's knowledge is thus passed on to a successor and natural descendant. This, as well as its secretiveness, is likely to explain why thatching remains so conservative a craft. One further result of this inherent conservatism has been the domination of the county by thatching families. At one time the Stanfords dominated the craft. Now, as the Catalogue Raisonné confirms, it is members of the Dodson family who appear most often, although they are not entirely dominant, and the family has split for thatching purposes into two, Dodson Brothers and Malcolm Dodson, a sole practitioner.

Significantly, none of the younger thatchers had been trained in this family way. Nine thatchers, spread over the whole range, but tending to be the younger ones, had been trained by masters who were unrelated to them. Only one (Pepper) had been trained by one of the dominant families of Cambridgeshire thatchers (Dodson Brothers). Two thatchers had been trained outside the county, Blades who was trained in Somerset and Devon, and Neeves, who was trained by 'several thatchers starting in Essex moving to Devon on to Hampshire and firstly [sic] in Bedford'. It is common practice to move elsewhere when training under an unrelated master is completed, which explains these last two replies, but Cambridgeshire is a large enough area to absorb the seven who appear to have trained under masters within the county.

None of the respondents had been trained under the various courses that have been set up since 1965, and are now under the umbrella of the Rural Development Commission. This again reinforces the traditional aspect of the craft. However, just one thatcher, the newest (Bond), was trained by the Thatching Advisory Service.

This scheme had its problems. The Thatching Advisory Service was set up in 1974 by a master thatcher Robert West who, for an annual fee of £65, offered the owners of thatched buildings what purported to be a comprehensive service to maintain and insure their roofs. 'Tailor-made protection as only the experts know how', he called it, designed to provide 'complete peace of mind for thatched property owners' (Thatched Owners Protection Scheme, brochure). He then advertised among ex-servicemen offering to train mostly ex-soldiers who were willing to exchange their demobilization gratuity for the promise of an outdoor life and gainful employment. For a fee they attended a thatching course of six months, part of which was residential, part in the field with a master. On completion, they received a certificate and, for a sum said to be in the region of £8-10,000, were allocated a franchise that purported to give them exclusive rights to practice thatching within a specific area. In essence they were given the rights to all the roofs belonging to the owners in that area who had subscribed to the service.

They were also tempted by access to cheap thatching materials, purchased in bulk by Mr West for their benefit. However, they had to pay a commission on every roof the Thatching Advisory Service put their way. Clearly, both the thatchers and the owners were potentially liable to sharp practice. The newly trained ex-servicemen discovered that their training was only as thorough as six months might make it, and their exclusive franchise did not stop well-established thatchers already working within their area from continuing to do so. Mr Bond had survived as an independent thatcher for nine years at the time of the questionnaire. Mr West, on the other hand, has retired a rich man, having done nicely out of the Thatching Advisory Service, which he finally sold to the National Farmers Union, which now runs it.

The lack of very newly qualified thatchers in the returns is not a complete surprise. Modesty resulting from inexperience may be one reason. That apart, conversations with individual master thatchers make it clear that the craft of thatching is not attracting many young men into becoming trainees, even though employment in thatching remains more or less steady. This could be due to a number of factors, particularly the hard manual nature of the work, the long period of apprenticeship, and the years of low pay when compared with wages in other building trades while this period of training is being undertaken. The final factor, and possibly a crucial one, may well be the high degree of skill that is required if a trainee is to become a master thatcher. The type of person with this practical ability and level of intelligence usually finds a better-paid alternative career to thatching.

While twelve of the responding thatchers employed no assistants, Blanchard said that he had been working on his own account for eleven years, during which time he had already employed three boys as assistants, who had all left the craft, and was then on his fourth. Of the remainder, Mizon worked with his brother, Blades worked with an assistant, whom he had trained to become a master, Potter was working with a single trainee, and Mansell had a single assistant.

Twelve of the responding thatchers working in Cambridgeshire worked alone. It seems that, after training, they would stay with their master until they felt competent enough to practise the craft of thatching independently. They would not be well enough established to employ an assistant, and it would be many years before they felt that they could take on a trainee. This also seems to emphasize the precariousness of the craft.

It appears from this that thatching is both a lonely craft and lacks an unquestionable reputation as a safe means of earning a good livelihood. The questionnaires brought to light the unpalatable fact that at some point during the working lives of the master thatchers who returned the questionnaires eight of the seventeen had worked in some other trade for a short period, often because trade was slack and they had to maintain themselves and family. Cox had worked as a roofer, peg-tiling and slating, Mansell as a qualified carpenter and joiner, Letch as a scaffolder and storeman. Of the remainder, two had worked in general building, another in 'distribution' and one as a part-time photographer. Like all countrymen, when times must, thatchers can turn their hand to most things, so long as all that is required is a practical approach to the task in hand.

A similar conclusion may be drawn from the area in which most thatchers work. The responses made it clear that the overall working radius of the average master thatcher within the boundaries of Cambridgeshire seems to be quite small in comparison to other trades within the building industry. Cambridgeshire is about thirty miles from east to west and fifty miles north to south. The working radius for nearly 70 percent of the master thatchers based within the boundaries of Cambridgeshire was no more than 20 miles (eleven thatchers out of seventeen replying to this question), with nearly a quarter of them travelling no more than ten miles. The percentage of thatchers prepared to travel further afield for work greatly reduced thereafter with the increase of every mile (see the graph in Appendix B). Nearly a third of those replying would travel at least 30 miles to carry out a day's work. This percentage dropped to 18 percent for a radius of travel up to 40 miles, and to 6 percent for a radius of 50 miles. These results are quite surprising because, in a county as sparsely populated as Cambridgeshire, most men employed in other trades within the building industry travel much further away from their base.

A 20-mile radius would, nevertheless, bring the majority of Cambridgeshire's villages into the orbit of a thatcher based on Cambridge or nearby, since the Isle of Ely to the north is still so sparsely settled. Such a thatcher might have some 500 thatched roofs within his working area. Ignoring repair work and re-ridging, and given an average life of a thatched roof of, say forty years (see Chapters 2 and 6), he would find himself competing for work on about ten or a dozen roofs each year with possibly half as many fellow thatchers again. Although it is impossible to talk of an average roof with much accuracy, a medium-sized house might well take 7.5-8 tons of long wheat straw for a re-thatch, and this would take a thatcher about seven weeks to lay (see case study in Appendix D). Without pressing these vague estimates further, it is clear that many of Cambridgeshire's master thatchers would be hard pressed to find employment right through the year. It is consequently easy to understand that thatching is a precarious trade and one which is also poorly remunerated.

While it is impossible to know with accuracy how far these working radiuses have changed over the centuries, since there are no records, it is clear that the limitations have changed with the advent of the lorry. There may in the past have been thatchers with skills so greatly prized that they worked a very long way from their base, living on the job until it was complete. But, until the end of the Second World War, most thatchers worked locally, and this is likely to have been the case since the Middle Ages. Their radius of work must therefore have been limited by how far it was worth walking or driving a horse and cart. My father's memory of working for his father some 9 miles from home seems to have been an exception, and this may well have been near the greatest limit of travel to enable him to carry out a day's work for a worthwhile wage.

This limit was probably centuries old. The average working radius would probably have been approximately 5 miles. Allowing for a walking speed of 2½ miles per hour, this would have meant a journey of approximately 2 hours each way to and from the thatcher's home base on top of a day's work when he arrived. If we compare this with today's average working radius of 20 miles we can see that this has increased fourfold. Moreover, the journey time by lorry would be little over half an hour, thus allowing the thatcher longer on the job, or, in line with modern employment trends, a shorter working day.

The majority of the responses to the questionnaire revealed that the clientele of today has greatly changed since the Second World War, along with other widespread changes in demography over the last fifty years. Most owners of thatched houses today prove to be people who have moved into the country from the towns, either to retire or to commute to work. A significant number of thatched cottages are owned for the purpose of holiday or weekend getaways. Ever decreasing numbers of these cottages are now owned by traditional country people who work in or on the land surrounding the village of their origin. Because of their novelty value to outsiders, thatched cottages can command a price on the housing market above the average for their size. Town people, with their high salaries, are the only ones who can afford them, leaving country people to live on in little modern brick boxes.

Thus those in need of the thatcher's skills tend to be 'townies', as they are known to the country folk of Cambridgeshire. This seems to have two consequences for thatchers. The first is beneficial. Just as town people are willing to pay over the odds for a thatched house, so are they also willing to pay to have it thatched. For all the hard work involved, thatching is therefore no longer the humble craft that it was when the majority of those in need of the thatcher's skills were comparatively poor or working in the difficult economic conditions that farming had suffered since the 1870s.

The second consequence may be less beneficial. The motor car and an influx of town people have opened up the countryside to newcomers who seem to be more likely to employ a thatcher who has been recommended to them, probably by another former town dweller, rather than simply to employ the local man. Thus the countryside has been opened up to the individual thatcher whose reputation and therefore work is consequently less localized.

The responses to the questionnaire allow similar conclusions to be drawn about the materials that thatchers use today, even after allowing for various significant modifications. One thatcher who commented on the fact that he now imports water reed from Austria and also states that far more varieties of water reed are now available than when he first started thatching summed up the most significant of these. The supply of thatching material, again, is an area of the craft that has been opened up by cheap transport since the Second World War.

Even so, traditional materials still dominate the craft of thatching. The responses to the questionnaire confirmed observations undertaken during the survey of thatched buildings. The survey found that 60 percent of all roofs thatched within the boundaries of Cambridgeshire used long wheat straw, 35 percent of all roofs used water reed and only 5 percent used combed wheat reed. The responses confirmed this conclusion: long wheat straw is the most widely used material with the master thatchers within the county and combed wheat reed by far the least. Whatever advantages cheap transport may bring, the old pattern survives from an age when transport was expensive. Interestingly, the responses also reveal that seven out of the seventeen master thatchers actually produce their own wheat, thus guaranteeing the quality of the thatching material they use.

Seventy percent of master thatchers said that they delivered the raw material to the site themselves. I suspect that this particular element of thatching practice, once again, has changed very little, the only significant change in this century being the mode of transport from horse and cart to small lorry. It is nevertheless likely that a number of house owners or occupiers once supplied their own straw after their crops had been harvested, but this has now dwindled to nothing and the responses shed no light on the subject.

Just as some thatchers produce their own straw (Appendix C), some 46 percent of thatchers produce their own spits, spars and rods. When I questioned a number of thatchers to find out why more of them did not do this, they replied that this was mainly due to the time element involved in producing the required number. Those master thatchers who did produce their own spits and rods confirmed that they prepared them from pre-cut lengths of willow and hazel sections that had already been cut to length beforehand. Even so, to produce enough spits and rods to enable them to carry out a day's thatching took approximately 3-4 hours, and this was usually carried out after the thatcher had arrived home in the evening.

Several of the thatchers responding to the questionnaire felt that those suppliers who had introduced a number of new species into their growing programme had helped to reduce the irregularities that were present in the older varieties of cereal crops. This may well be so, but its importance is partly reduced by the fact that the preparation processes that take place on site before thatching begins allow for these irregularities and ensure that they do not affect the process of thatching itself.

One thatcher felt that modern insecticides and artificial fertilizers reduced the life span of the straw when it was used for thatching. There is no confirmatory evidence for this so far but it should be investigated further even if the comment was a green response to what might be seen as a green building practice.

Last but not least the questionnaire revealed that the majority of the master thatchers operating within the boundaries of Cambridgeshire felt that no significant technical changes had occurred in the techniques of securing the various thatching materials to a roof structure within their working lives. This is borne out by all the evidence presented above. Their working lives cover half a century, roughly from the end of the Second World War, a period when practically everything else has changed in the countryside. It is also a period when much has changed in the building industry, but by no means everything. Bricklaying and masonry are still governed by age-old methods, so it less surprising that thatching should be too.

A final point that emerged from discussing the craft of thatching with older thatchers is how the notion of a thatching season has been eroded in recent years. Formerly, the thatching season began when the likelihood of frost had receded in the spring and ended when frost again threatened in the autumn. This season may also have been limited by the amount of local straw available each year for thatching. The result was to limit the thatcher to about eight months of the year, perhaps enough to thatch only four roofs.

Recently this has changed. In the 1970s, according to my father, this old seasonal practice remained. Today, the pressure of work and the need to work efficiently mean that a thatcher will continue to work if he has the commissions regardless of severe weather, even though it is generally accepted that thatch which has been affected by frost during the course of being laid will have a shorter life span.

A thatcher with a reputation for good work will not only travel long distances but may well have a long waiting list of clients. Before his retirement in 1993 my father was thatching roofs that he had been commissioned to do in 1990. Again, these changes have affected other building trades. Quality may suffer, and so may the thatcher, but where quality is prized the work seems endless.

Chapter 5 - THATCHING METHODS

Part 1 : Long Wheat Straw

Introduction

There are no definitive rules that determine how a roof should be thatched. A skilled craftsman will choose those methods that, through his training and experience, he has found to be most suited to the particular set of circumstances that he finds himself facing. No two roofs are the same and from time to time the thatcher will need to be flexible in his approach to a specific job, perhaps occasionally using his experience to combine one method with another to achieve the best results.

Although thatching techniques vary according to the materials being used and to traditional regional styles, all thatchers follow the same basic procedure of starting work at the eaves of a building and progressing up the roof to the ridge in overlapping courses. Some may lay strips horizontally across the roof, others may work vertically taking a series of courses known as 'stulches' upwards. The material is fastened firmly to either the timber battens of the roof or to a base coat of existing thatch.

The technique of thatching in long wheat straw has characteristics that can readily be distinguished from those of other thatching techniques. For instance, a roof thatched in long straw may be easily recognized from a considerable distance by the way in which the eaves and barges are invariably decorated with a pattern of liggers and cross rods. This distinctive feature is not shared by either of the thatching techniques used for combed wheat reed or water reed. A closer approach heightens the impression that the roof covering as a whole has simply been poured over the underlying structure, causing the angles to be rounded, as opposed to the more tailored, angular appearance of a roof thatched in combed wheat reed or water reed (see Ill. 16).

Illustration 16 - A newly thatched long wheat straw roof at The West Green, High Street, Barrington (Ba 03), showing how the straw seems to have been poured over the bones of the structure

So much for general principles. How a thatched roof takes shape in detail depends on the various obstacles, such as chimney-stacks, dormer windows, gullies and hips, that have to be accommodated, and which particular methods the individual thatcher chooses to employ so as to place the various thatching materials on the roof structure.

One of the commonest types of roof structure in Cambridgeshire is found on the cottages of the former peasantry. It consists of a very crude series of rafters, which are lashed together at the ridge, and in turn lashed to a ridge pole. This ridge pole is exactly that, a branch of a tree with a consistent diameter laid between the crossovers of the rafters and lashed into position (see Ill. 17). The lashings tend to be either of tarred cord or, in the older structures, of withies. The withies are produced from coppiced or pollarded willow that has grown to the diameter of a finger, and then made flexible for use as lashings by steeping them in boiling water before use. In the majority of roofs there are also timber collars, which, again, are fixed by lashing them to the rafters. The ends of the collars usually protrude from the rafters. This forms a crude sort of hook, which, when the thatch is fixed into position, provides a secondary form of fixing and helps to prevent the thatch from slipping down the slope of the roof (see Ill. 18).

Long Wheat Straw

Preparation on the ground

The straw must be prepared systematically at ground level to ensure the longest overall life span of the finished roof. This will also improve its appearance. To start, a quantity of straw is thrown forward into a layer, using a shaking action to separate the bundles (see Ill. 19). One or two buckets of water are thrown across each layer so as to make it more flexible and pliable to use. This process is repeated layer upon layer, always removing prepared straw from the front and adding unprepared straw at the rear. This process is called 'building on the back'; it continues until a 'heap' or 'bed' is formed. Depending on the size of the available space, a bed is usually built up until it is about 6 by 3 m (20 by 10 ft) and 3 m (6 ft) high. When a bed has

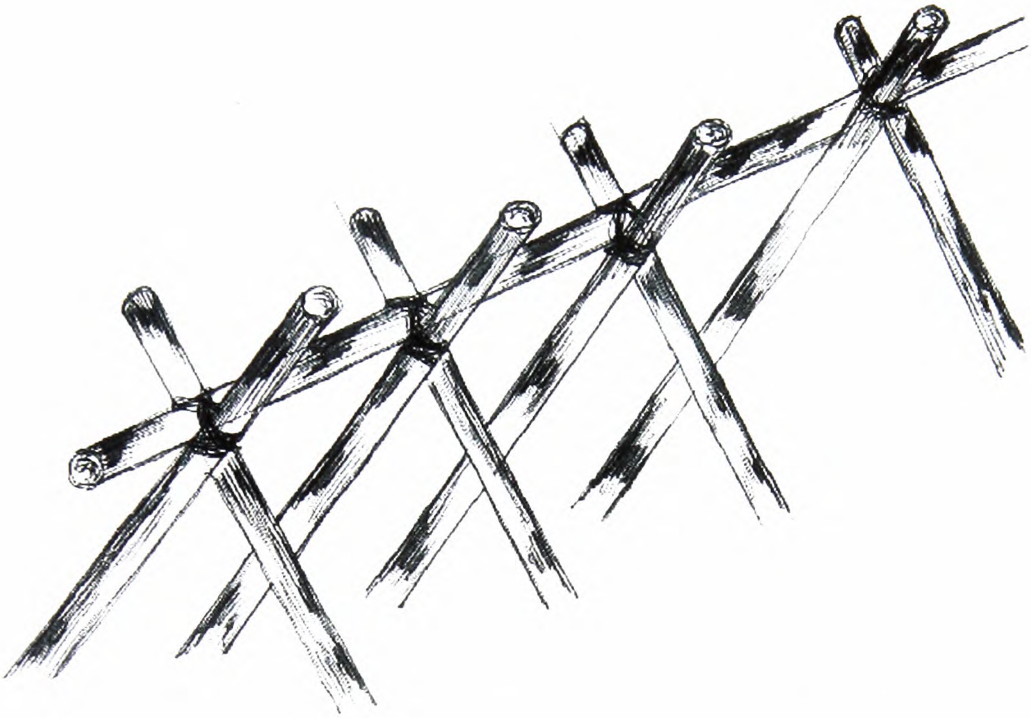


Illustration 17 - Diagram showing how the ridge pole is lashed to the rafters in a former peasant cottage.

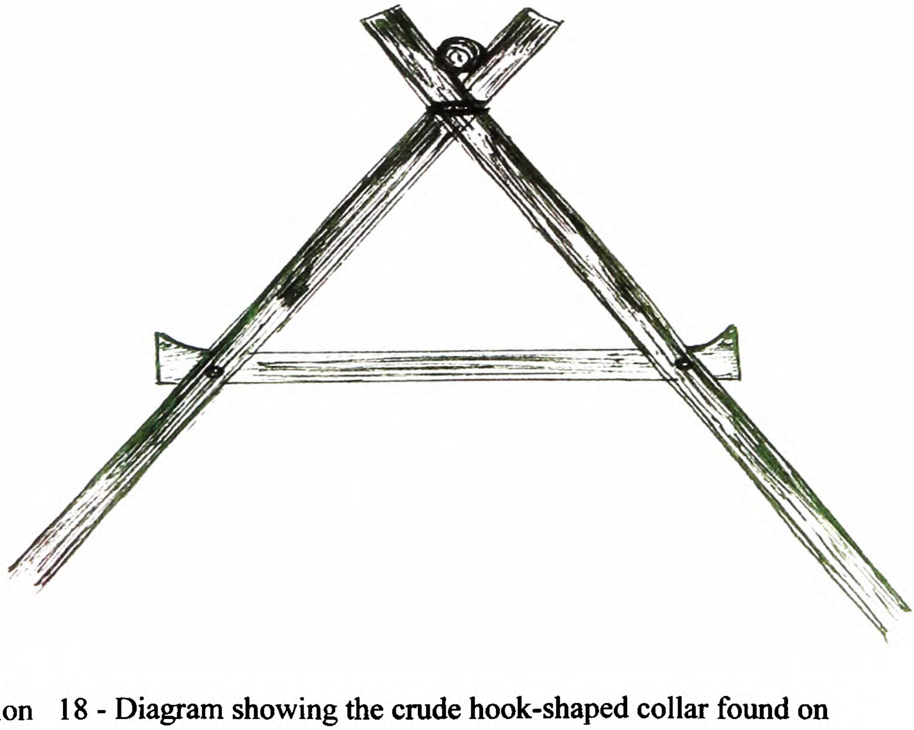


Illustration 18 - Diagram showing the crude hook-shaped collar found on some former peasant cottages

Illustration 19 - Straw shaken into a heap forming a bed from which the yealms are drawn been built up to this size, it is allowed to soak or 'steep' for a few hours before it is used. This process softens the straw to ensure that it is no longer brittle and will work easily.

Standing to the front of the bed, the thatcher rakes any cross straws out for later use, and tidies up the area immediately in front of the bed. He can then start to pull lengths of straw from the bottom of the bed, handful by handful, along its full length (see Ill. 20). This forms a layer of straw, some 1-1.25 m (3-4 ft) long, and as wide as the bed (see Ill. 21). The end of the layer further from the bed should be as straight as possible as this will help later in the compression of the straw. This end of the straw is known as the big or large end, because the way the straw has been pulled out leaves the greater amount in this position. The small end meanwhile is left almost touching the bed.

This straw is then 'yealmed'. On his knees, the thatcher makes a short chopping motion with both hands so as to split the layer into a series of bunches, which he then compresses with his hands against his knees to form 'yealms' Each one is as wide as he can stretch (usually 1-1.25 m, 3-4 ft), and comprises a tightly compacted quantity of straw approximately 100 mm (4 ins) deep. The more tightly compacted the yealms are, the better will be the ultimate finish of the thatched roof. By running the fingers through the straw the short waste is then removed.

The straw is now ready to be carried on to the roof. However a yealm cannot be carried up without further ado. Several yealms are then stacked, one on another, on to a yoke or 'bundle cord'. A yoke comprises a V-shaped branched piece of hazel into which the yealms are placed and tied with cord, whereas a bundle cord, which is more popular in Cambridgeshire, is simply a length of hazel on to which the yealms are placed and tied (see Ill. 22). The average number of yealms placed in either of these two implements may be four or five, and together their average weight will usually be in the region of 50 kg (1 cwt). They are then carried up the ladder on to the roof for fixing into position.

Illustration 20 - A master thatcher drawing straw from a bed to form a yealm

Illustration 21 - A layer of straw, known as a yealm, after it has been drawn from the bed

Illustration 22 - A bundle (above) placed into a bundle cord, and (below) tied

A thatched roof also requires straw prepared in a different way, for example for applying to eaves, ridges and valleys so as to provide a firm base. Straw rolls are formed by pulling out a bunch of straw from the bed, bending it back on itself, pulling out a second bunch and feeding it into the angle of the first bunch so that the two mesh together, and securing them with a binding of tarred cord. A third bunch is then fed in, enmeshed and secured, then another, and so on until the required length of roll, usually about 150 to 200 mm (6 - 8ins) in diameter has been produced (see Ill. 23).

One further process is carried out at ground level that involves the use of the straw made up in the bed. This is to make up the straw 'bottles' needed for setting the eaves and gables (see Ill. 24). Each bottle consists of a small bunch of compressed straw taken from a yealm, about 150 mm (6 in) wide, and made with an exaggerated large end by stripping away some of the straw from the other end and further compressing it. The thin end is then folded back along the length of the straw, adding to its thickness and tied, thus forming a characteristic bottle shape (see Ill. 25). Two methods of tying are employed in Cambridgeshire, one using strong twine, the other straw tightly twisted into what is known as a 'bond'. Bonds are now more rarely used and tend to be found in earlier thatched roofs.

To form the bond of straw a small handful of long straw is taken and placed under the arm and held firmly between the upper arm and the body whilst under pressure from the arm (see Ill. 26). Both hands are now used to twist the straw into a strong rope - the bond. The bond is then firmly secured round the small end of the bottle. Except for a little tidying up, the bottle is now ready to be fixed into position.

On the roof

Before any courses are laid, a thin layer of wheat straw or occasionally water reed or some other material is spread on to the roof as a lining course over the battens. This is called a 'fleeking' layer and tends not to be employed when re-thatching roofs today. It does

Illustration 23 - Diagram (above) showing how a ridge roll is formed, and (below) a ridge roll before being secured to the roof

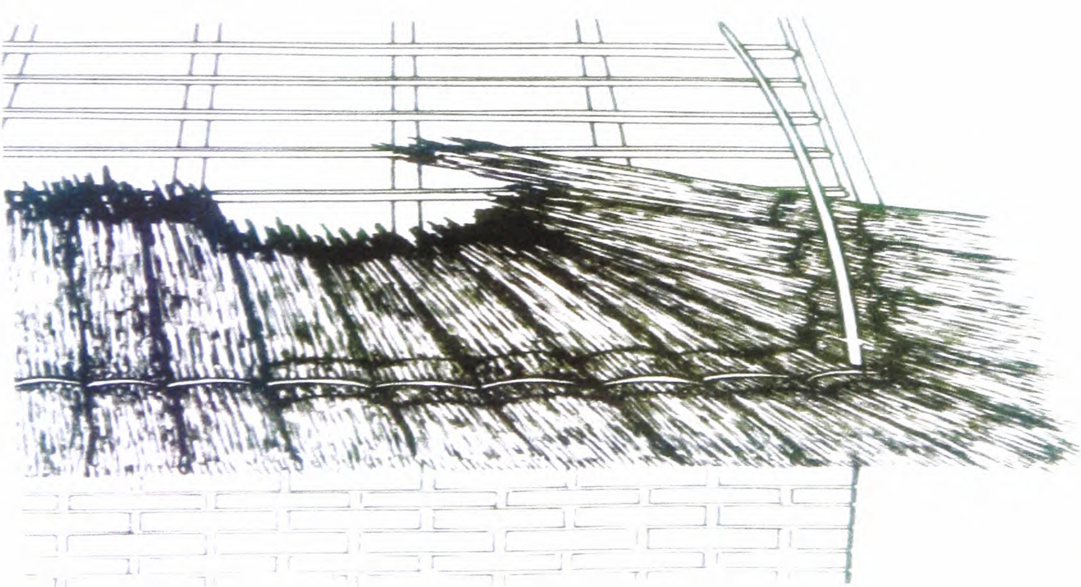


Illustration 24 – Straw bottles applied to eaves and gable

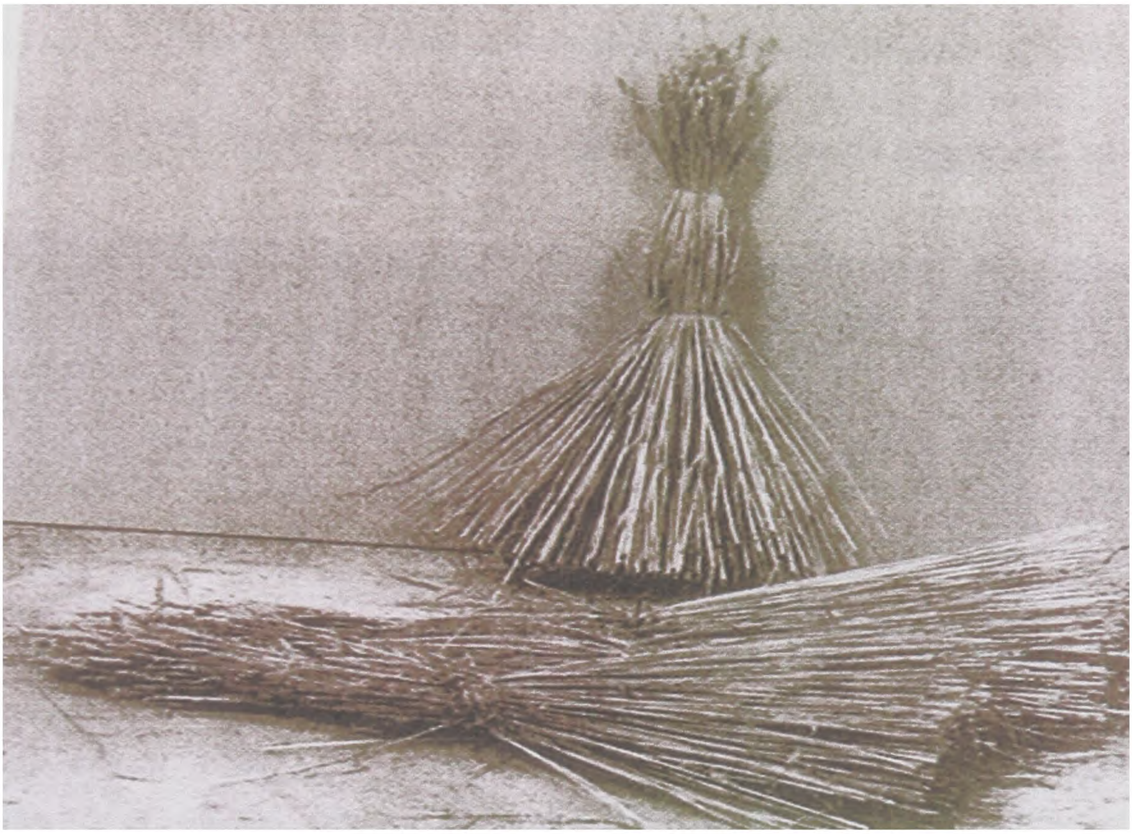


Illustration 25 - Two bottles showing their exaggerated large ends

Illustration 26 - A long wheat straw bond being formed nevertheless have the effect of making the roof look neat and tidy when seen from the inside. In the past this would have had a plaster layer applied to it forming the internal finish to the rooms immediately below the thatch. This layer should not however be confused with back-filling as used with other materials. The fleeking layer was originally made from a wide variety of materials. Wild grasses, broom, heather, bracken, aquatic plants and a group of less usual materials such as dock, willow shoots and nettles were used as well as straw, but straw waste from the threshing process was by far the most common.

One of the most important features of thatching in long wheat straw is the preparation of the roof before the actual thatching begins. A new roof must start from the basic structure, but an old roof does not necessarily have to be stripped if it has already been thatched with long wheat straw. This is because a roof thatched in straw has traditionally been seen as divided into two layers, a base coat and a weathering coat, and the method of fixing makes allowance for this. Providing the base coat is in good condition, the weathering coat alone needs replacement. Roofs of combed wheat reed and water reed, however, are traditionally seen as a single entity from base to top surface, and therefore do require the roof to be entirely stripped down before new thatch can be reapplied.

In this process all the decayed and superfluous thatch should be removed down to a firm base layer in good condition. An excessive thickness of thatch should also be stripped to eliminate unnecessary weight on the roof structure. All barges and all decayed eaves should also be stripped out and a new straw base coat fixed in, usually at the same time as replacing the whole weathering coat, with hazel sways and iron hooks.

The main work on the roof starts at the eaves and progresses upwards. It begins by positioning a bottle at 45 degrees at the intersection of the eaves and the gable (see Ill. 27). A bottle is needed at eaves level, at every corner of the roof. Its purpose is to act as a kind of corner stone, setting the all-important angle at which the thatch will lie at the corner, both along the eaves and along the edge of the gable. Further bottles are then laid beside it along the first section of the eaves, their angle being decreased until they are vertical. A bottle is also needed on a hipped roof, in

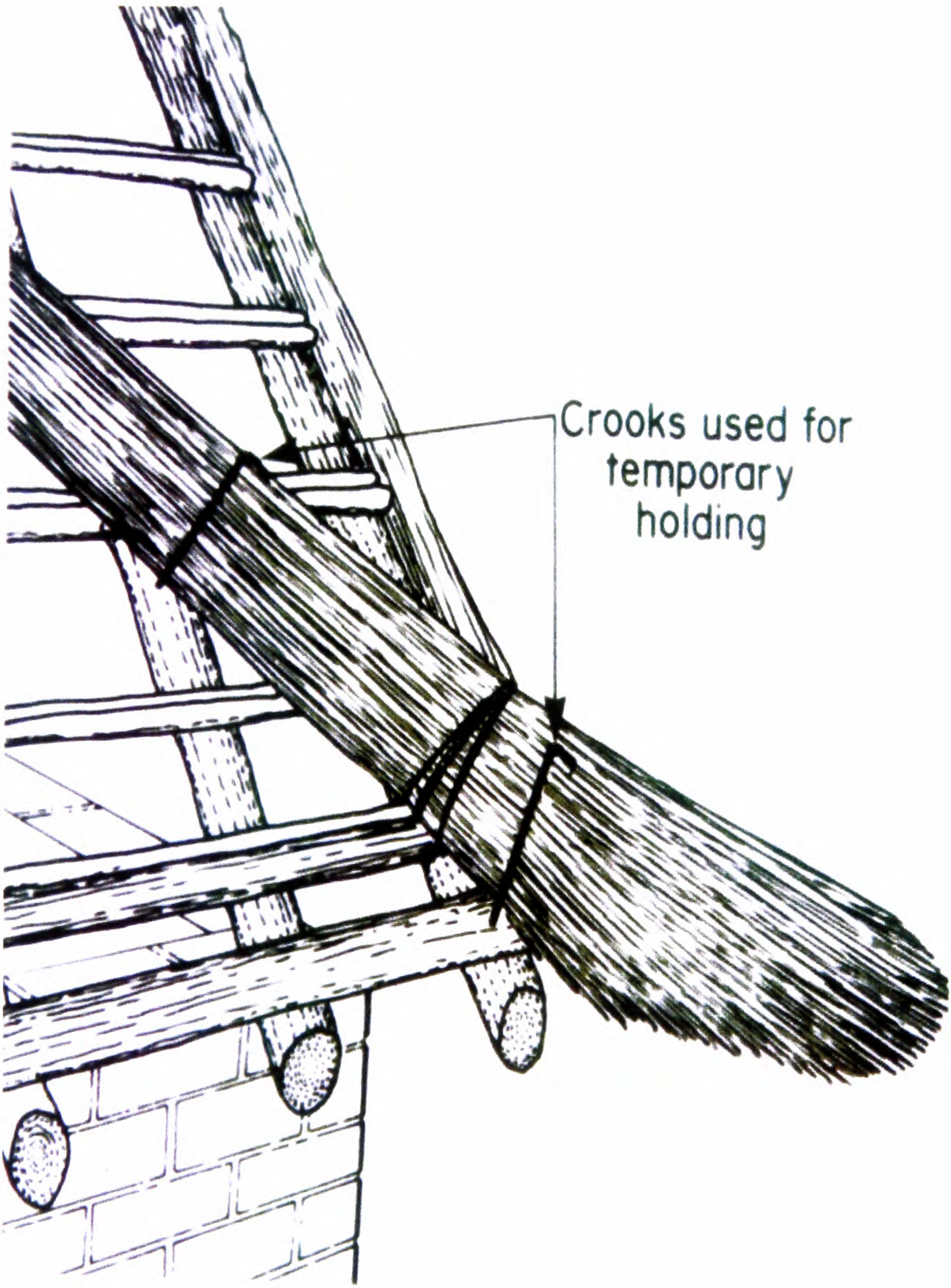


Illustration 27 - Diagram showing how a bottle is placed at 45 degrees to the eaves and barge which case it is placed so as to lie along the hip itself (see Ill. 28), and again further bottles are similarly laid beside it. When the second eaves bundle is laid in position adjacent to the bottle, by running the hand between the two, any crossed straws will be straightened out. At a later stage further bottles are laid, section by section, until they line the eaves of each individual slope. The bottles are fixed in such a manner as to allow half their length to overhang so as to allow ample scope for cutting a solid under-eave.

The bottles are fixed into position by one of two methods. One method is to use hazel or willow rods or 'sways' fixed by iron hooks, which are driven into the rafters (see Ill. 29). The rod is laid horizontally over the bottles, about half way up them, and just within the line of the gable and the bottom of the roof, so that an iron hook can be driven into the rafter as low as possible. The alternative method is to use tarred cord or, now more rarely, straw bonds.

A very early variation of these methods that can still be found in dwellings throughout Cambridgeshire seems to combine the two. It is characterized by the rods being tied to the rafters, rather than being fixed with hooks, clamping the thatch between the rods and a base layer of thatch. This method requires two men to undertake it, one on the roof to feed the tarred cord attached to a needle through the thatch to the internal surface below, and a second man inside the roof void to pass the cord around the rafter, then to attach it to his own needle, and feed it back through to the external surface of the thatch where the first man can then pull it tight and secure it (see Ill. 30). This variation became obsolete when timber battens were fixed to the rafters, an innovation resulting from the introduction of tiled and slated roofs, which needed battens on to which the tiles or slates are fixed. The combination of the curved iron needle and the use of timber battens also cuts down the manpower required to tie the bundles from two to one. Even so, it is rare for a thatcher to strip a roof fully for the purpose of fixing battens to it, despite this saving.

Before tarred cord was commercially available, home-made twine was used instead. This was made with a winding tool. The research found only one person who owns a winding tool and knows how to use it. The tool in question resembles a carpenter's brace (see Ill. 31). In place of

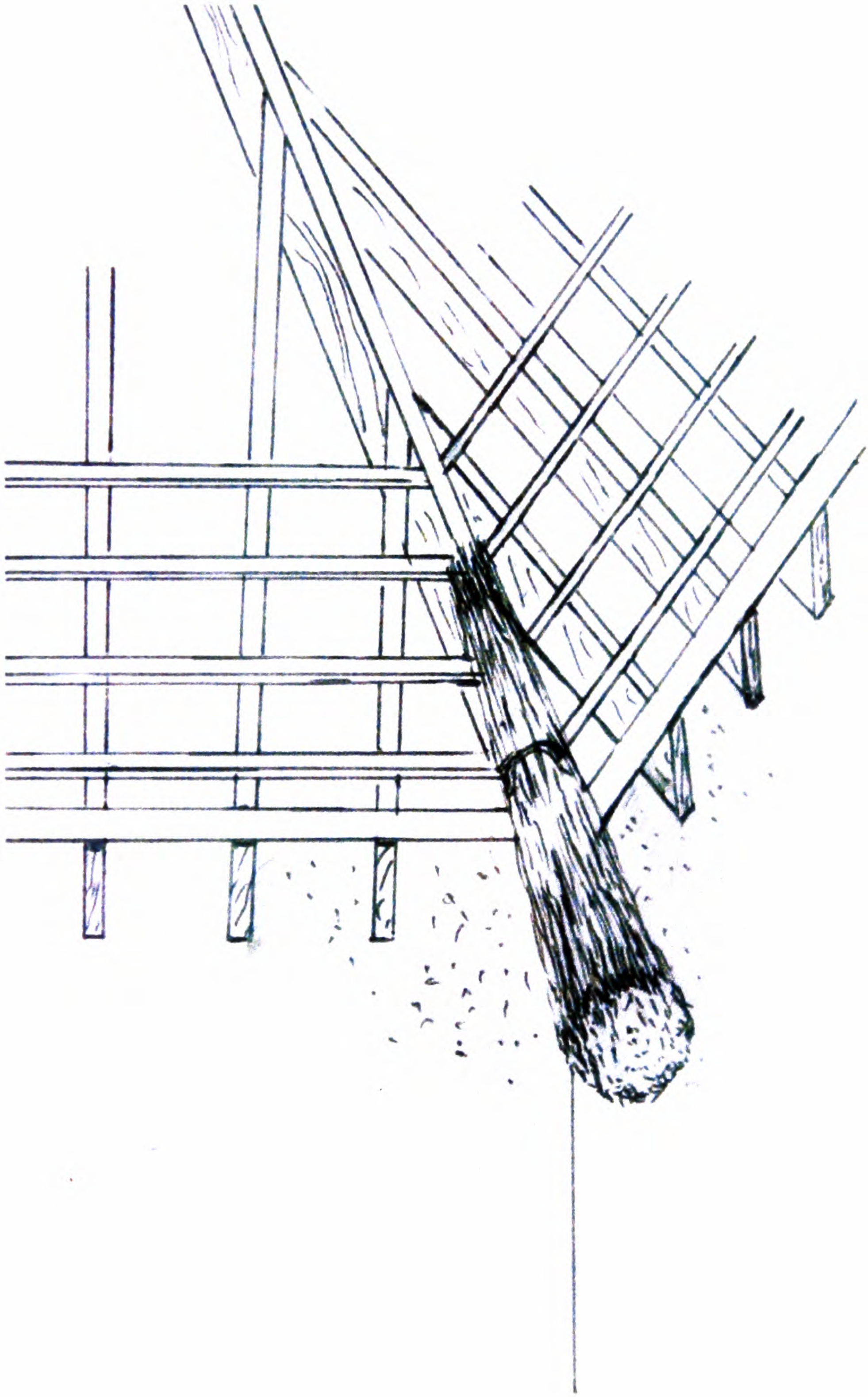


Illustration 28 - Diagram of how a bottle is placed on a hip rafter

Illustration 29 - Bottles secured along the eaves and barge

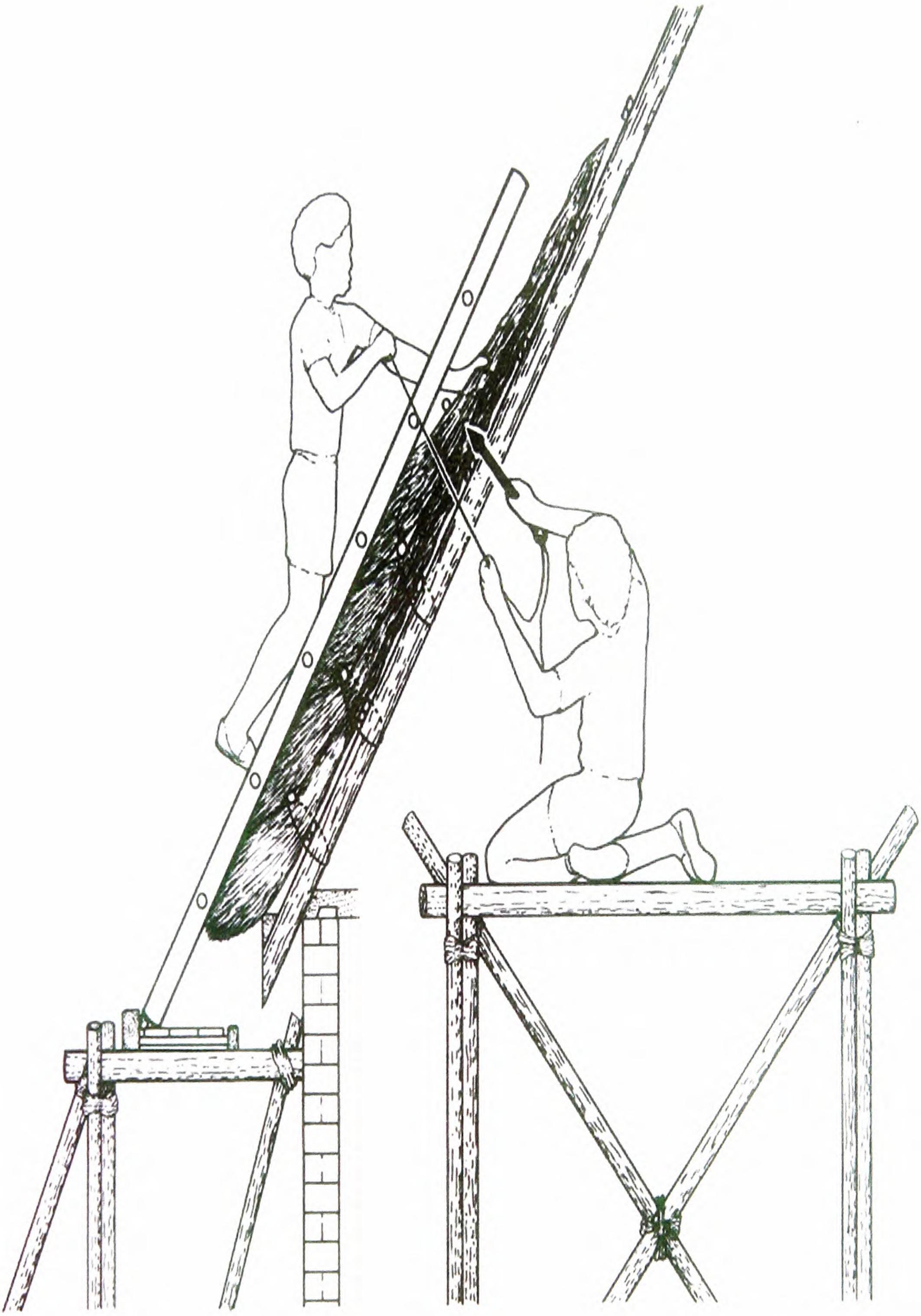


Illustration 30 - Diagram showing how the thatching material was traditionally stitched to the roof with a straight needle

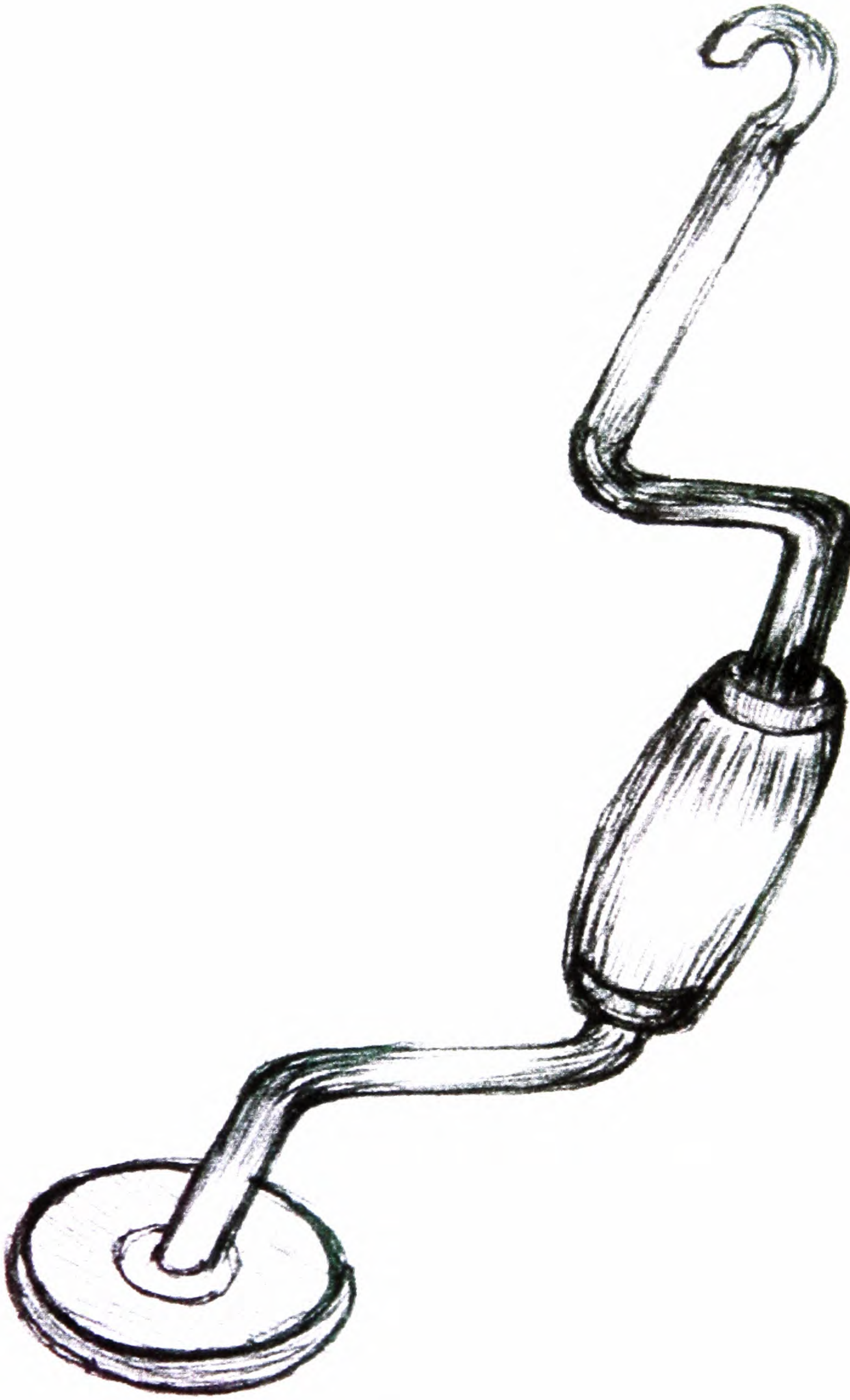


Illustration 31 - A winding tool

the bit, a hook or some form of clamp is deployed. The tool is then used by fixing the loose end of the fibres to a post or peg, the tool is then wound, twisting the fibres together and creating a strong fibrous twine which can be used to secure the thatch to the roof structure. The fibres themselves were taken from such plants as brambles, alder and willow withies.

The more popular method throughout Cambridgeshire is by tying or 'sowing' the straw bottles on with tarred cord. This is traditionally carried out with a curved iron needle (see Ill. 32). The needle is used to feed the cord through the thatch and under the timber battens clamping the straw between the roof batten.

Every effort is made to provide tight, solid eaves, not merely for the sake of appearance, but to facilitate the cutting operation of the eaves at a later stage. By driving a long spar into the thickness of the bottle just below its top and then into adjacent bundles at a downward angle they will be drawn tightly together.

When rods and hooks are used instead, and the corner has been set, it now becomes a simple matter to lift the hazel rod to add more bundles to the eaves by sliding additional ones underneath it. These are then held in position by hooking the rod down and driving in the long spar.

Turning to the gable, the bottles are laid in the same way to run up it, each one overhanging the barge-board by approximately half its length. The large end of each bottle, which has been tapered for the purpose, is forced beneath the rod holding them, further bottles are laid continuously, one above the other, beneath the barge rod and held in position by iron hooks as works proceeds. Alternatively the bottles can be tied in position using tarred cord.

In order to tighten up the bottles as much as possible, the same method is employed as when tightening the eaves, whereby a spar is driven in a downward direction through the first bottle into the next and so on with each bottle as they continue up the roof (see Ill. 33 for relation of spar to barge-board). Laying the eaves and barge bottles is usually done in stages, leaving the

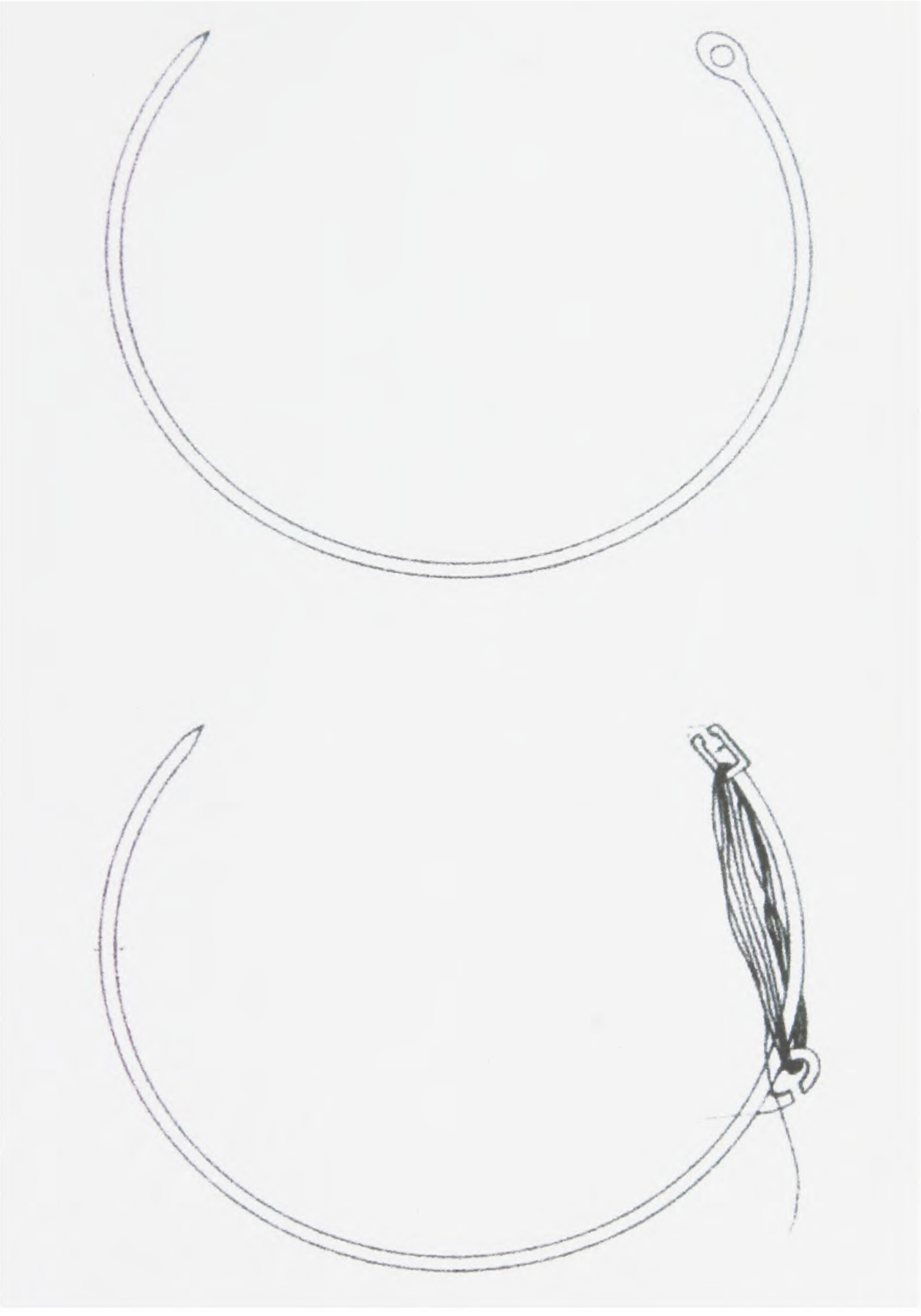


Illustration 32 - Two types of curved thatching needle, the lower one enabling a length of cord to be used several times without re-threading

Illustration 33 – An additional spar fixing to the barge bottle remaining part of the roof unstripped and thus less exposed to the weather.

It is noticeable at this point that the pitch of the bottles already fixed in the eaves and barge is less steep than the pitch of the rafters because they are fixed with their large end downward. The pitch is also lowered further by a 'tilting board', which is fixed to the eaves and barge. The purpose of a tilting board is to raise the lower or outer, exposed ends of the bottles so that the thatch will bristle outwards towards the weather, and so give greater durability to the roof.

At this stage the main part of the thatching begins. A good supply of yealms is contained in the loaded yoke, which for a right-handed thatcher, are situated on his left hand side, with the large end of the yealms towards the ladder. The cord securing the full yoke is released and lightly bound, for instance to a roof batten, to prevent the yoke slipping down from the roof. The thatcher grasps each yealm firmly with both hands, and, passing it in front of him, sets it in position on the roof to his right, with the large end downwards. For a left-handed thatcher, the process of course is reversed.

It is not sufficient merely to lay yealms against each other, since a sound joint must be made, by ensuring they are enmeshed. The exposed edge of the yealm that is already in place is levered upwards, temporarily holding it with a needle. The further side of the new yealm is then placed squarely against the edge of the yealm already in position, and the two are ruffled together by running the hands along the joint, one hand to the left, the other downwards to the right. Pressing the left arm across the middle of the course, the free hand is used to pluck the long superfluous straws from the lower end, thus making the surface both level and tidy. This done, the needle is removed and the joint pressed down, completing the operation. The needle is now inserted against the exposed edge of the new yealm, and so the process continues.

An extra yealm is laid on the corner of the roof (see Ill. 34) to give added strength and thickness. This extra yealm is fixed by means of a row of short spars driven into the firm portion immediately below the tarred cord or rod, depending on the method employed. These spars are not driven in at right angles to the slope of the roof, but with sufficient slope to

Illustration 34 - An extra yealm laid to a corner, showing the row of spars halfway between the hammer and the thatcher's left hand, and the tarred cord immediately below his left hand eliminate the possibility of turning water inwards.

Having now set the eaves and barge courses of the gable into position the first course can now be laid. This is a single course, one yealm thick, the first of which is laid at the same angle as the bottle beside the gable or at the angle of a hip, and placed almost as low as the eaves bottles, with the large end of the yealm downwards. The bottle beside it is laid at a decreasing angle, and so on until, after about 2 m (6 ft), the yealms are laid vertically.

The thatcher's preferred fixing method will determine whether the courses are laid more conventionally horizontally across the roof and held into place with hazel rods, or whether the courses are laid vertically up the roof to the apex of the ridge. This latter method is known as the 'stulch' method, and is equally used throughout Cambridgeshire.

With the horizontal method one or two needles are used to force each yealm tight and the first course brings the eave up to the required thickness. Similarly this course can be fastened with a row of evenly spaced spars, which are driven in just below the first rod or tied into position with a tarred cord. One further method by which a course can be secured is by substituting a twisted straw bond or 'scud' for a rod. This last method is very rarely used today but several thatchers remember using it during their apprenticeships.

When a section of thatch has been laid, usually as wide as the reach of a thatcher working without moving his ladder, say 1 m (4 ft), a second section is started. The thatcher moves the ladder on and continues in the same way. Thus consecutive sections proceed horizontally along the length of the roof until close to the end of the slope. He then goes right to the other end and works inwards until the sections meet and the horizontal course is complete.

With the stulch method, however, when one section has been laid, the thatcher climbs the ladder and starts another section above, to produce a vertical course.

Still keeping the large end downward, the consecutive horizontal courses are started from the barge, where each course is placed in such a position as to overlap the previous course by two thirds. This should provide a thickness of approximately 400 mm (1ft 4ins) through to the batten face. The lower part of the upper course is fixed into the upper part of the course below, these two courses between them combining to double the thickness of the thatch. The actual fixing is achieved with a sway or tarred cord, or a combination of methods depending on the thatcher's choice. At intervals, the sway is fixed down to the roof structure with tarred cord or hooks, which will be holding such a thickness of straw as to require them to be 230 mm (9-10 ins) long.

Yealms are laid in this manner, course by course, and the consecutive courses are extended upwards towards the ridge. The position of the courses at this stage can be clearly identified. Eaves bottles and sway are followed by the single first course sparred in below the sway, the consecutive courses then follow, fastened down together with sways.

From the angle shown in Illustration 35 it is possible to see the position of the horizontal lines of the sways holding the consecutive courses, where they overlap the vertical sway that holds the bottles that form the base layer running up the barge. Illustration 36 shows the process at a more advanced stage with the next course ready for swaying down. The horizontal sway is fixed in position across the two courses. The bottles and yealms that are fixed at the barge incline inwards rather than lie vertically, with the result that the thickness of the thatch decreases at this junction where their thinner upper ends meet the vertical yealms further in. This lack of depth must be made good. So additional bottles are laid to bulk out the thickness of the thatch and these are swayed down as the work proceeds.

When a section of the roof has been covered, the side rake is used with a combined beating and combing action. The barge is raked in an outward direction according to the angle of the thatch, removing all the short waste.

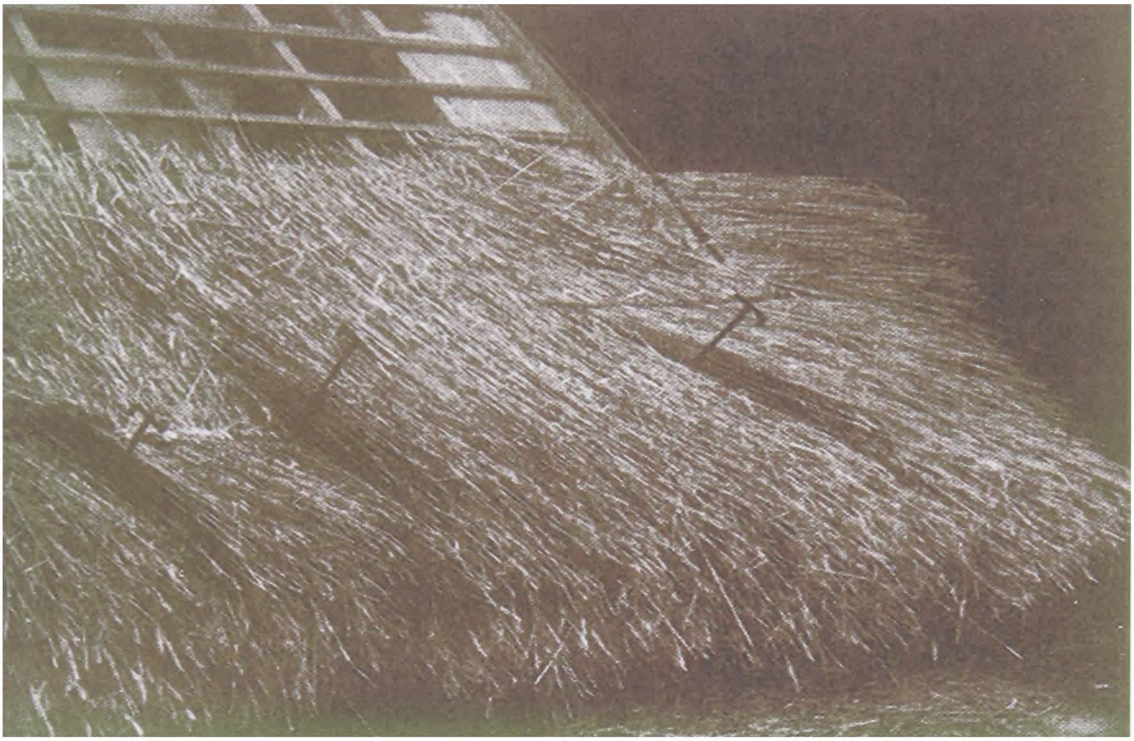


Illustration 35 - Two lines of horizontal sways and a single vertical sway running up the barge

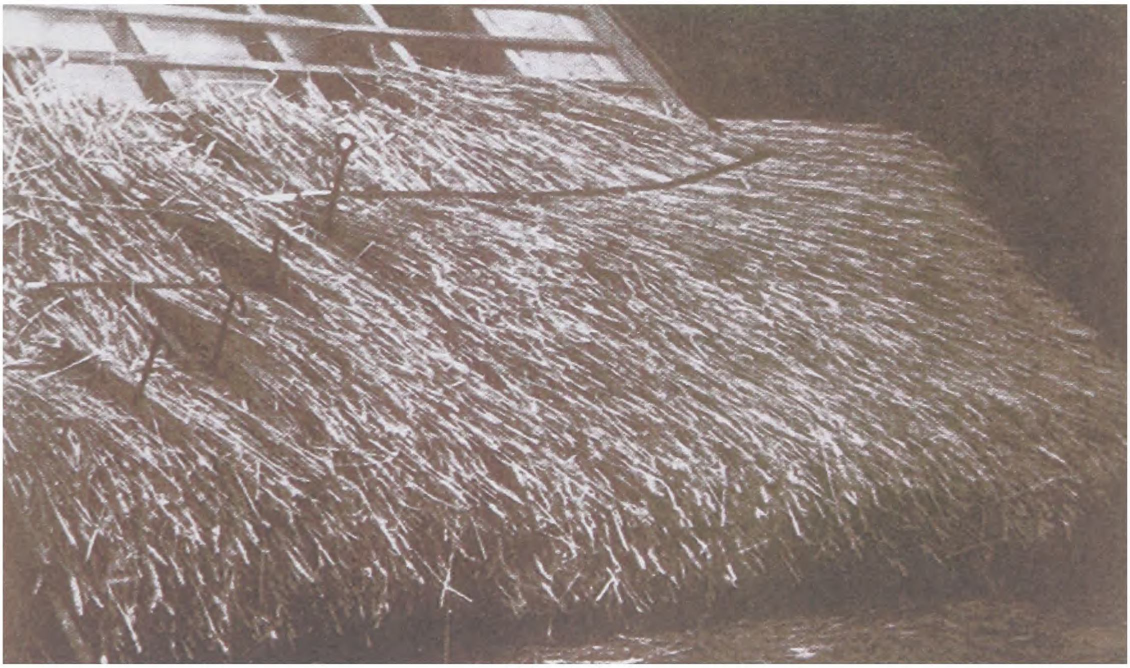


Illustration 36 - The same roof (as in Ill. 35) with the next course ready for the sways to be secured

Turning to the left-hand barge at the further end of the roof, work proceeds in the same way as at the right-hand end, leaving a small gap between it and that part of the roof already thatched from the further end (see Ill. 37). This short gap is known as the ladder or infill course in Cambridgeshire. When the left-hand barge is set, the gap must be filled and the thatched eaves joined with the main work. These are swayed down allowing ample overhang as already described. Starting on the extreme left hand and working inwards, the double courses are laid and swayed down. The remainder of the left hand barge is repetition work until the apex is reached.

Laying the ridge

At the apex of all thatched roofs is a ridge. It is the final piece in the jigsaw and protects the fixings of the top course of the thatch below. Spanning the thatch on either side of the roof, the ridge provides a watertight saddle to shed rainwater on to both slopes without ingress at the apex and gives a decorative finish.

Each ridge has to be individually planned and constructed according to the building and type of thatching materials used. There is no hard and fast rule. All methods are acceptable and vary depending on the thatcher's skills, regional style and the structure of the roof.

The first step in laying a ridge is to secure rolls of thatch on top of the ridge-board to maintain the steep pitch, and to act as a buffer against which the ridge can be built. Over these rolls at least one course of thatch is laid. The final stages will depend on whether the ridge is to be block-cut, flush or one of the other decorative alternatives available.

Block-cut patterned wrap-over (or saddled) ridge

If a block-cut patterned ridge is being built, the next procedure is to lay side courses to either side of the ridge roll, as an undercoat to the saddle course. The small end of the yealms forming

Illustration 37 - Completed left barge course, with the ladder course still to be completed the side course tend to project over the ridge roll. These are either bent and twisted back downwards and secured, or trimmed off. The side courses are secured with hazel or willow spars. Some of these spars may be only temporary, to be removed when the saddle course is fixed.

The saddle of thatch is laid over the ridge from one side to the other and fixed to the side courses with a pattern of spars. Finally, the side courses and saddle course are cut to set off the roof to the best advantage. Many different cuts are used and include scallops and Vs, either blocked out or reversed, and cloverleaf designs or simple, gentle curves. The arrangement is generally of the thatcher's choice and he will fashion it to express his own individuality, knowing that it is this capping that invariably attracts most attention. Possibly up to a thousand different ridge patterns or styles exist and relatively small variations in the numbers of their cross-spars, or liggers, and in the thickness of the ridge enable a particular thatcher's work to be clearly identified by his fellow craftsmen.

Nether the material nor the thickness of the side courses or the saddle course bear any significant relevance to the lasting quality of the ridge. The wrap-over (saddled) ridge will last ten to fifteen years whether flush or block-cut and whether the block is 25 mm or 50 mm (1 or 2 ins) thick.

Flush Wrap-over (or Saddled) Ridge

A flush ridge is one where the wrap-over, or saddle course, fits straight on to the top course of thatch (see Ill. 38). There are no side courses and hence no cut patterns. This classic simple finish is a favorite with many thatchers though most people prefer to see something more elaborate. Its life span is the same as that of the block-cut ridge, about ten to fifteen years.

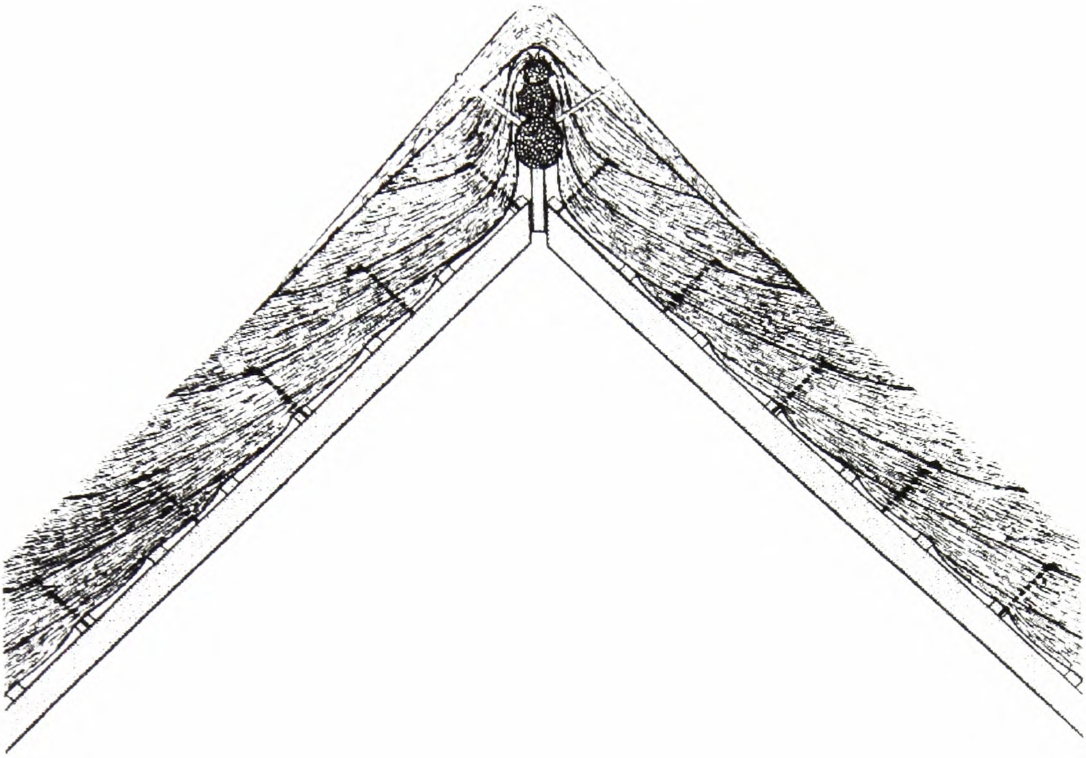


Illustration 38 - Diagram showing a saddle or wrap-over ridge

Butt-up and Twist ridges

In the West Country a 'butt-up' ridge with no wrap over is popular. For this the butt ends of straw or wheat reed are fixed pointing up with the weather-side butts being slightly higher than those on the other side (see Ill. 39). This method works well on a steep roof but does not last as long as a saddled ridge, six to ten years being typical for this type of ridge, whether block-cut or flush.

Another style of ridge sometimes found in the West Country is the Devon twist ridge, which is made by twisting and tying straw round a pole, which is removed before the sections are placed on the ridge like a cap.

However the ridge is finally decorated, it is usually formed by finishing the base coat at the apex of the roof by butting this against a wide roll of thatch that is mounted on the ridge itself. A second, thinner roll is then fixed above, and the top course of the weathering coat is again butted against this. The two sways that hold the barges cross over each other at the end of the ridge and clamp the end of this roll in place. The top course is then completed.

However, on top of this comes the ridge itself. This comprises a third roll, the ridge roll, which is smaller still, and the side courses that both cover the ridge itself and provide a decorative cap. These may take the various forms described above and for each there is a particular technique. Nevertheless, part of the technique is common.

Straddling the apex of the ridge, the thatcher takes a yealm from the loaded yoke, which is situated just behind him. As one end is larger than the other, half the yealm is reversed to make it of equal thickness down its length. Grasping part of one of these modified yealms, the thatcher draws out its ends so that it will be long enough to cover both sides of the ridge. He then lays this across the ridge so that half the yealm is on one side, half on the other covering the ridge roll and side courses. He proceeds from the barge at one end to the barge at the other,

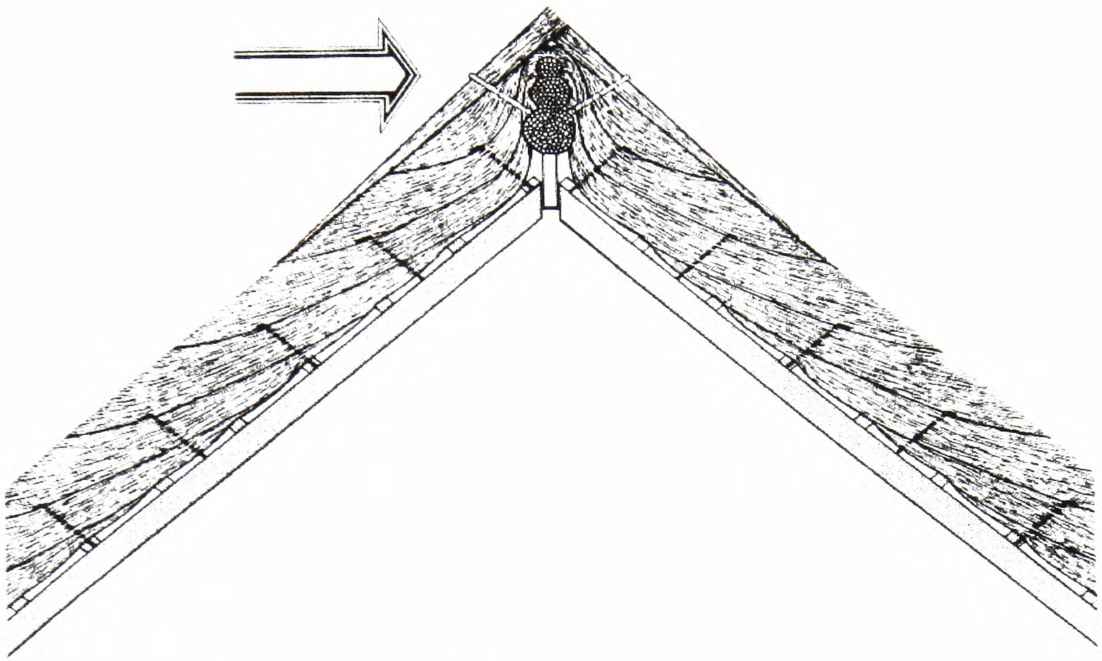


Illustration 39 - Diagram showing a butt-up ridge, showing how it is designed to resist the effects of the prevailing weather (shown by direction of arrow) inserting the needle centrally into each part of a yealm and using it as a lever to force the yealm tightly against that part of the ridge already laid.

The ridge course should measure approximately 150 mm (6 ins) in thickness at the apex. Whilst still in this position on the ridge, the thatcher is able to fix the top ligger, which is a form of decorative spar. This has the twofold purpose of sparring the ridge course down to the ridge roll, which is tied to the lower rolls and the ridge tree, and also has the effect of producing a straight horizontal line, which is the hallmark of a well-finished ridge.

In this way more thatch material is added in a similar way (see Ill. 40), until the whole ridge is completed, to the necessary depth for it to be firm and solid.

After working the ends of the ridge course closely together, four tiers of liggers are sparred down and set apart by 200mm (8 ins), 300mm (12 ins) and 150mm (6 ins) respectively, from the top downward, and cross rods fitted to whatever pattern the thatcher requires (see Ill. 41). An alternative pattern employs only three tiers, the spacing between them being 200 mm (8 ins) and 150 mm (6 ins) respectively, from the top downward. An alternative pattern of liggers, known as the triple diamond pattern, requires the spacing between them to be again the same.

Cap to ridge

The end of the ridge produces a problem because the ridge courses cannot be fixed down here in a conventional way. This problem whether it be at a hip or gable end is dealt with by using a cap-end. (see Ill. 42) A gable end may alternatively be finished in the form of a pinnacle, which will be discussed later in the text.

To start the cap-end a ring-topped needle is inserted centrally in the apex of the ridge. A yealm is then taken and lengthened out as though for the saddle course to the main ridge. This yealm is bent in the middle around the needle and swept forward on either side of the needle and

Illustration 40 - Needles being used in order to compress the additional thatching straw

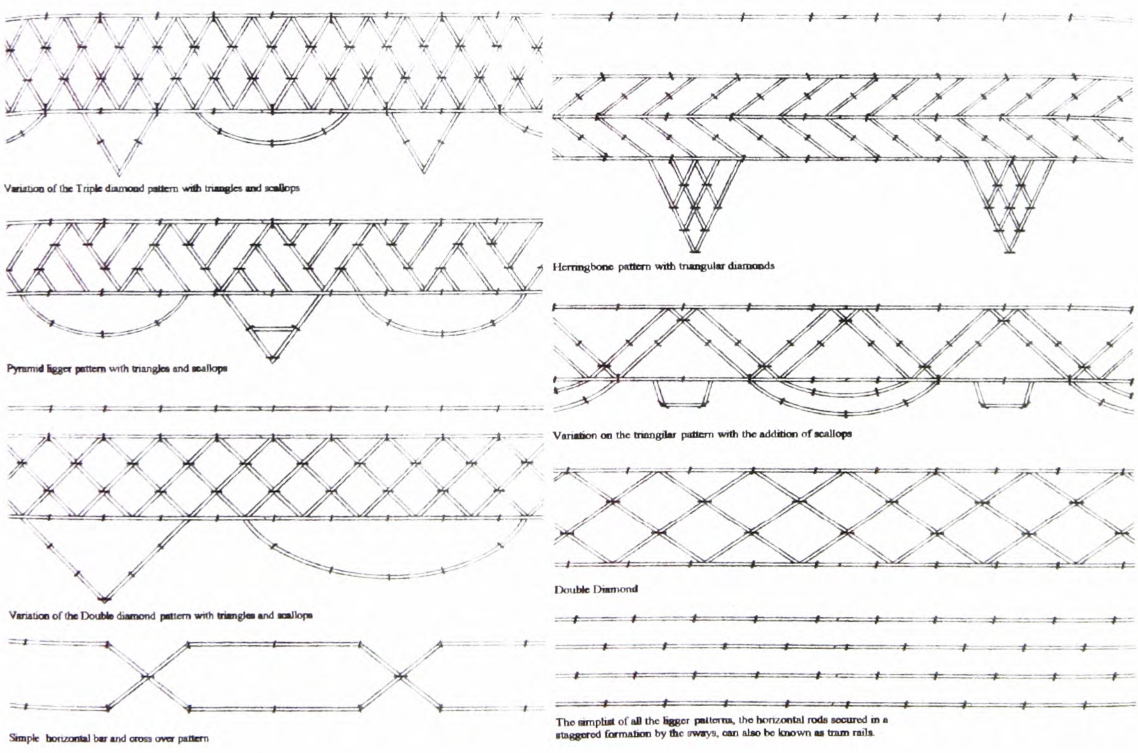


Illustration 41 – Diagram showing various ligger patterns used in Cambridgeshire

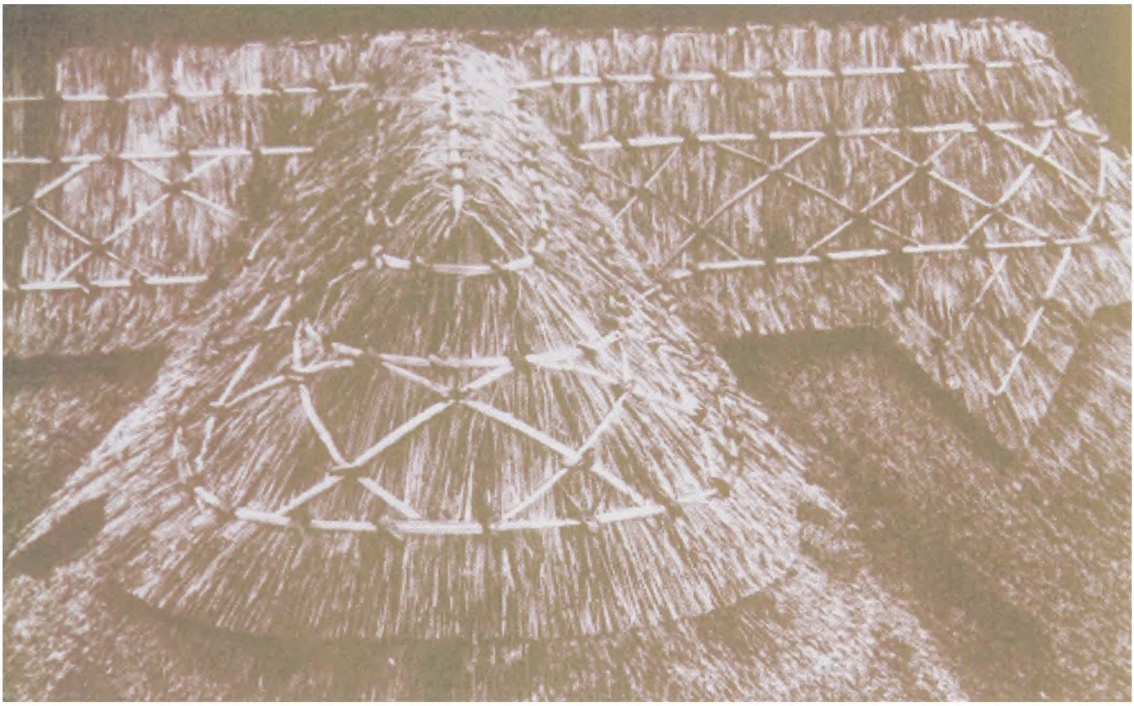


Illustration 42 – A cap-end

secured with spars. In the case of a hip the straw is kept in line with the straw of the hip end (see Ill. 43). Another needle forces it tightly together and more yealms are laid to it. This is continued until the whole cap-end is complete. In the case of the gable end, sufficient yealms are added to create a bulk of thatch overhanging the apex of the gable and laid in the same way. These yealms are sparred to one another and finally the liggers are wrapped around this bulk of thatch and the fixing process finalized before the cap-end is cut and trimmed.

Pinnacle to ridge

There is an alternative to capping the ends of the ridge. Where the pair of liggers that are fixed to the top of the barges of the gable ends cross over, there is a void beneath them (see Ill. 44). This is packed with further yealms to complete the apex and push up the end of the ridge to form a pinnacle and thus further enhance the ridge line (see Ill. 45). The two liggers are now sparred down and the superfluous ends removed after the yealms have been packed in. This addition to the ridge is known as a pinnacle.

Hips

While the end of a roof at the point where it meets a barge is a form of obstacle, and the ridge is another, there are several others that must be specially addressed. One of these is the hip. Following this there are valleys, chimneys, and dormer windows.

The most common form of hip found throughout Cambridgeshire is the half-hip. This is a distinctive feature of a building and thoroughly worthwhile if it is executed properly. Whether for a full hip or a half hip the same principles are involved. In each case it is necessary to work from the hips inwards towards the centre, and, of course, to work upwards from the eaves of the hipped section towards the apex of the hipped section of the roof.

At the gable the bottles are laid so that they are angled downwards and outwards against the lower, gabled part of the roof. This angle must be changed so that where the hip starts, higher

Illustration 43 – A yealm bent round the needle to form a cap end, before it is secured with spars

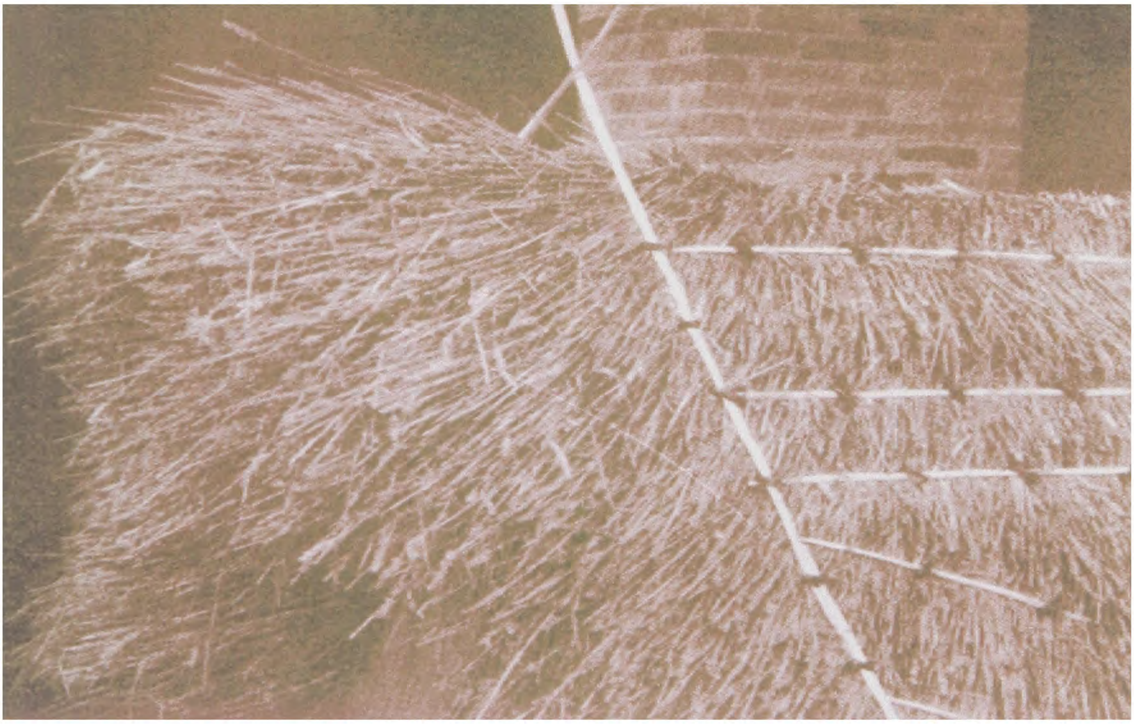


Illustration 44 – The void under a pair of crossed-over liggers at the gable end

Illustration 45 – The same gable (as in Ill. 44) with yealms packed under the crossed-over liggers up, they have become parallel with the angle of the hip rafter. Similarly, the bottles laid along the eaves of the hipped section are laid parallel to the adjacent hip rafter and are then laid increasingly vertically as they approach the centre of the eaves of the hip, thus ensuring that the tops of each bottle points towards the apex and finally meet the bottles laid on the other side with a flush join.

This completes the first course. Consecutive courses can now be laid. Firstly, the yealms are laid in the normal way to form the series of courses from eaves to apex, starting with the yealms laid over the hip and, again, working inwards towards the centre, following the angle of the hip rafter, and gradually becoming vertical as they progress across the roof from either side.

The centre section of the hip is left, because the ladder occupies this space during the working process, and this ladder course is filled in later in the same way as it is on a main slope.

Valleys

The solution to waterproofing the valleys can take a number of forms. The reason for this is that the junction of the valley tends to hold water, thus the thatch in this area, if not placed and fixed to the roof correctly, deteriorates quickly, and, without attention, there is a risk of the roof leaking.

Only four methods of waterproofing valleys are used in Cambridgeshire. The first two methods employ other materials, namely lead and tile, to waterproof the valley and form a gutter. The lead is laid on a valley board as it might be in the case of a conventional tiled roof and the thatch from the two intersecting roof slopes overhangs the lead thus allowing the water from the thatch to flow on to the lead valley and off the roof. The same principles are employed in the construction of a tiled valley. The tiles are fixed to timber battens spanning across the valley, and the thatch is made to overhang, in the same way as it does a barge, to provide a waterproof junction.

When the valley is to be thatched, a further method consists of fixing straw rolls across the valley and double thatching it to give it a soft curve, so that rainwater can be expelled easily. An alternative to this is to fix timber battens across the valley (see Ill. 46) and tie straw bottles to them, again giving the valley a soft curve. With both of these traditional methods the straw bottles are fixed into position with tarred cord, or alternatively fixed with sways and spars. In both cases, the eaves bottles are tilted from the vertical as they approach the valley so that they come into line with the valley board. As a temporary measure an iron hook is driven into the tilt board for the purpose of keeping the work tight until the valley has been completely thatched. Looking straight into the valley the direction of the yealms is more clearly seen (see Ill. 47). Similarly, the vertical angle of the yealms is gradually decreased well away from the valley so that when it is reached the angle of the yealms is the same as that of the valley rafter.

Continuing the courses round the valley, up to five yealms, depending on the pitch of the roof and the angle of the valley, are laid on each side with their large end uppermost. This provides for the extra width in the roof that must be covered as the valley rises towards the ridge. When the valley has been laid, the two adjacent slopes must be swayed down. The point of the sway on the return side is inserted below the point of the sway that has already been fixed to the other slope. A closer view shows the advantages of this method of joining the two sways, as it obviates driving a hook into the actual valley rafter and perhaps damaging it. Packing yealms may also be laid at intervals with their small ends covering the sway, if these are needed to bulk out the valley and give it the sweep that will reduce the effects of weathering.

Chimneys

Turning now to the chimney set axially on the ridge, there are two separate areas that require attention, the sides and the lowest part of the stack. This lowest part must be dealt with first. A straw roll is placed on to the base course of thatching immediately below the chimney. The weathering course is then secured over this and its tops are either twisted or bent back underneath, or it is simply cut off. A lead flashing is then applied to make a watertight seal, and

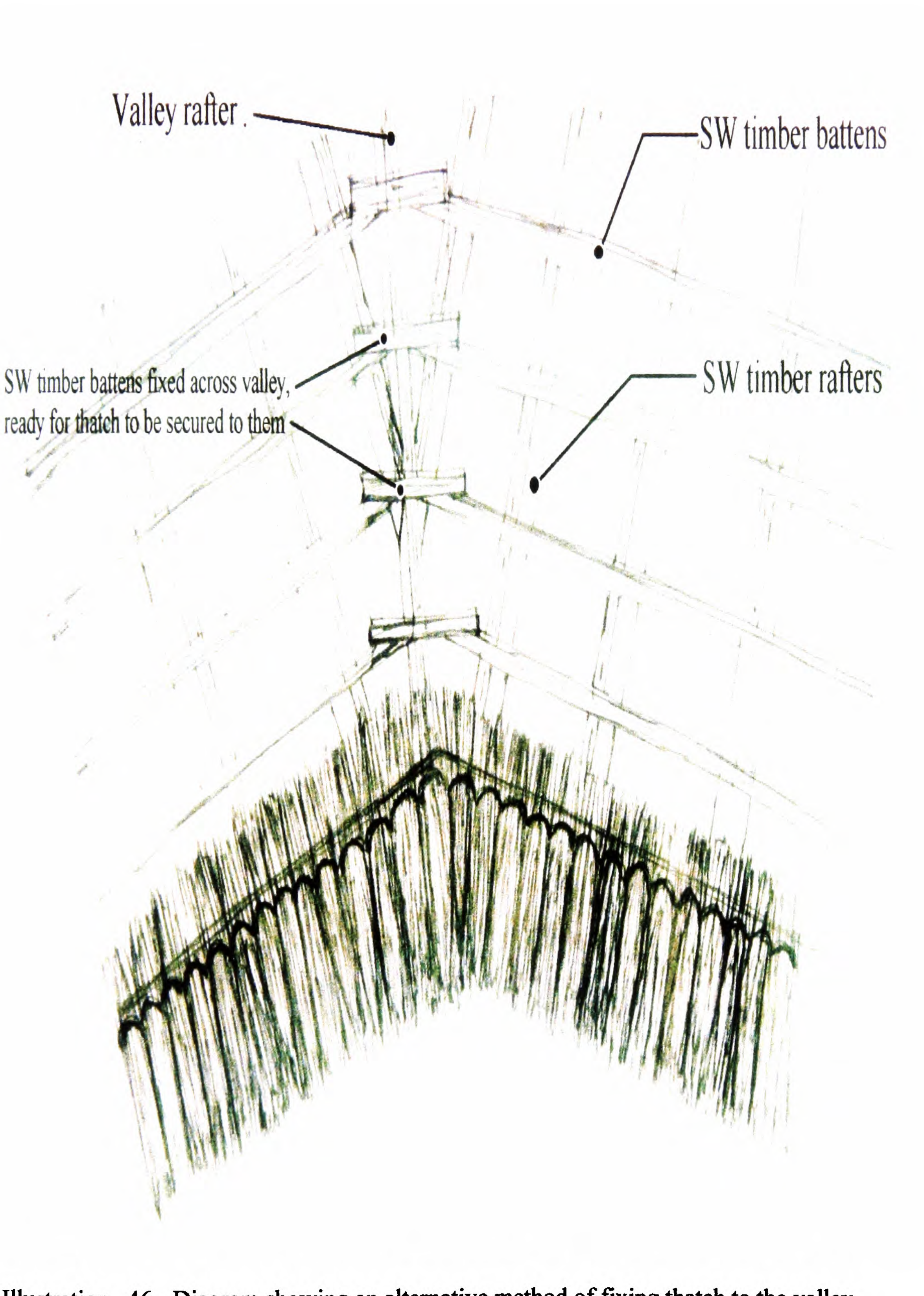


Illustration 46 - Diagram showing an alternative method of fixing thatch to the valley using soft wood timber battens in a ladder type fashion to which the thatch is secured

Illustration 47 - A valley showing the junction of the yealms liggers are put in place to secure it just below the flashing.

Formerly the roll and the ends of the sways were fitted into the intervening course below two over-sailing courses of brickwork on the face of the chimney. The weathering-course was then secured over this and the ends forced between the two over-sailing brick courses forming a watertight junction. These over-sailing courses are frequently to be seen on the chimney-stacks of thatched houses, and also on tile-clad houses, where they are evidence of former thatching, but they are now seldom used for their original purpose, modern thatchers having apparently forgotten what they are for.

The sides of the chimney-stack are treated like valleys, with the exception that the courses upon their approach are turned out so as to shed the water away from the stack, unlike those of a valley which turn in. Once these are secured with sways, the sides of the chimney are finished with lead or cement-sand flashings.

Dormer Windows - Gabled Dormers

There are two types of dormer window to be found in Cambridgeshire, the gabled dormer and the eyebrow dormer. The gabled dormer is in fact a roof in miniature. This also applies to hipped dormers, but these are extremely rare in Cambridgeshire. Moreover the gabled dormer is structurally separate from the roof into which it is built, and is often constructed as an addition in roof voids where a floor has been inserted to provide additional accommodation. Gabled dormers are normally flush with the wall below and rise directly over the eaves plate. However, they may be built out from the roof some way above the level of the eaves. Either way, a gabled dormer is relatively easy to deal with since it employs the same techniques used for barges, valleys and ridges, and aprons as used for chimney-stacks.

The only real obstacle is the junction between the ridge of the gabled dormer and the main roof. To make it fully waterproof the ridge of the dormer must be finished completely before the thatching courses of the main roof are brought up to its inner end and then laid above its apex. However obvious this procedure may seem, it is surprisingly often forgotten by the novice thatcher.

Dormer Windows - Eyebrows

The eyebrow window is less commonly found on the thatched roofs of Cambridgeshire than the gabled dormer, but is more likely to be an original feature. While the gabled dormer is built out from the roof, the eyebrow dormer is structurally integral with it. Eyebrow dormers vary in shape and size and also where they occur in the roof. The commonest form of eyebrow dormer found in Cambridgeshire if it is well placed produces a very pleasant undulating thatch-line.

When an eyebrow window rises directly above the wall below it, the eaves simply sweep over it in a curve to produce the eyebrow effect. Occasionally an eyebrow dormer is built out from the roof some way above the eaves, but, just as with a gabled dormer, this necessitates the use of an apron in front and below it, in the same way as a chimney does.

To start the thatching of the eyebrow window, the eaves bottles are continued up and over the window until the apex is reached, following the vertical direction of the rafters. The next course sweeps over the eaves bottles and is fixed down with a sway. The relationship of the sways to the window can be seen in Illustration 48.

Once the apex of the window has been reached, work now starts on the opposite side of the window, where eaves bottles are similarly laid until they meet at the apex, and a further course is added, again as on the first side. The next course is important because, as it approaches the window and the start of the upward concave curve on each side of the eyebrow, the amount of straw in each yealm is reduced so that the course is faded out before the convex curve over the window starts. This is done so as to fill in the concavity and smoothen the rise caused by the window structure. Above this, consecutive courses sweep right over the window structure,

Illustration 48 – The relationship of the sways to an eyebrow (with a temporary straw sway still in position just beneath) allowing the surface of the work to level out gradually well before the ridge line is reached.

Once again, where the dormer has been inserted, there will be an apron in front of and below it, which is treated in exactly the same way as an apron along the bottom of a chimney-stack.

Cutting & Trimming

The completed barges are now ready for cutting and, although the actual method and tools employed may vary from county to county, the method outlined below is more generally used. In order to simplify the cutting process a straight edge can be fixed accurately on each barge to act as a guide for the knife. The knife is held with the handle leaning slightly outwards, provide a drip on the topmost edge of the barge. The lower edge of the cut will overhang the barge board by about 100 mm (4 ins). The barge may, of course, be cut without the use of a straight edge in which case needles are used as markers to ensure a straight cut. After the main cutting with the long knife is finished, superfluous straws are removed with shears.

By using the shears, all edges are squared and lines straightened so as to ensure a neat and tidy finish. This also applies to windows and eaves for which exactly the same cutting method is applied, the advantage of clean straight lines being apparent from the completed section of the gable. (see Ill. 49). As always, the main top coating of thatch is well combed down with the side rake so as to obtain a neat and tidy finish.

Ridging and repairs.

A roof thatched in long wheat straw can be given a new lease of life when it is re-ridged and carefully repaired. The decayed part of the old ridge, together with any remaining liggers and spars, should be removed. A new roll, which can be sparred down centrally along the ridge, will in all probability be required. A new flush or patterned ridge, according to requirement, can be

Illustration 49 – The clean-cut lines of a gable laid. This would include the appropriate side courses or skirts, using the same methods as used for new work.

The main body of the existing thatch can be cleaned down and holes and worn places carefully filled with new straw. This should be fixed with short, thin spars and the new straw neatly trimmed. New liggers should be sparred to all eaves and barges.

Chapter 5 - THATCHING METHODS

Part 2 : Combed Wheat Reed

In the previous part the laying of long wheat straw was described in detail. There exists another technique of thatching in straw, which is known as combed wheat reed. Although the raw material used in each of the two techniques is the same and suffers from the same present difficulties of supply, there are considerable differences in preparation and in the technique of laying them on the roof.

Thatch in combed wheat reed, though seen throughout most of England, is most widely used in the south and west. In Cambridgeshire the main bulk of combed wheat reed occurs in a belt running north to south on the west side of the county. Its name, however, must not be confused with water reed, the two materials coming from widely separate types of plants. There is, however, a distinct similarity in the method of application of the two materials to the roof structure, both of which are laid 'reed-wise' with the butts of the stalks exposed.

It is thus easy to see how this method of thatching with straw can easily produce a roof that could be mistaken for water reed. To the untrained eye the similarity is such that the name of the method of thatching further confuses the issue. Unlike long straw thatch, which has been described as looking as though it has been poured over the roof, combed wheat reed presents a neat close-cropped finish. When new, long wheat straw appears to be more ragged because the protruding heads are still attached to the stem. The preparation of combed wheat reed hides the heads, which always lie at the inner end of each bunch and are thus well below the weathering surface. From a distance combed wheat reed can easily be mistaken for water reed and only a closer examination will reveal that the eaves and gables of the wheat reed are cut to shape in a way that forms a distinguishing point between the two techniques.

The water-shedding qualities of combed wheat reed and water reed are also similar. The drops of water can be seen dripping from stalk to stalk over the whole surface of the roof, rather than running down the solid surface of a roof covered with long wheat straw.

The wheat reed arrives on site in the bunches into which it was tied after harvesting. On arrival it is normally stacked on a layer of old thatch or similar waste material. This helps to protect it against rising damp. The stack, if possible, should be covered with a tarpaulin as a protection against adverse weather until it is used.

One great advantage with wheat reed is the minimum of preparation required on the ground. Each bunch is taken from the stack and butted on the spot board to level the butts. Excess or loose straws are removed from the butt end by clipping with shears. This process of dressing the wheat reed on the ground is as important as the preparation of long wheat straw into a straw bed from which the yealms are drawn.

Firstly several bunches are stood closely together and water is sprinkled into the end of each bunch. The bunches are then laid horizontally and allowed to soak, after which they are ready for use. This operation results in making the initial 300 mm (1 ft) of the butt ends pliable, thus reducing the risk of the straw lengths breaking when the handling operations are carried out to position the material on the roof.

Wheat reed needs far less initial preparation than long wheat straw before it can be employed as a roofing material. A wadd, namely a double handful of wheat, is prepared by working two handfuls together so that they are even, and then butted on the spot board so that the ends are all together. (In the process of thatching in wheat reed the term 'wadd' is used, this being the equivalent term to 'bottle' in long wheat straw.) This constitutes all the preparation required on the ground, and the work of setting the wadds on the eaves and barges can now begin. The wadd is held lightly in the crook of the arm and taken up to the roof.

The fixing of the eaves and barges involves the wadds being laced to the roof structure with tarred cord. Firstly, a straight hazel (or sometimes willow) sway is nailed to the battens adjacent the barge board so that the wadds can be firmly tied down. Secondly, a staple is hammered into the bottom of the end rafter, and string is fixed to it for tying in the corner wadd. The underside of the wadd is trimmed to allow it to lie flat. As the barge wadds are laid up the barge, the tarred cord passes around them lacing them firmly to the sway.

The first eaves wadd is tied at 45 degrees to the barge in the same manner as bundles of long wheat straw are tied (see Ill. 50). The cord is passed round the lowest batten and pulled very tight. A tilting fillet, laid along the foot of the eaves, presses the lower end of the wadd upwards, and resists any tendency to slip. More eaves wadds are secured, progressing in the same way as for a roof thatched in long wheat straw.

A tool called a leggett is used to dress the wadds into position. This also has the effect of tightening the cord. Lacing the barge wadds into position involves passing the cord over the wadd and underneath the sway. It emerges between the two wadds and is pulled very tight, whilst at the same time pressure is applied to the wadd with the free hand. The cord is then knotted. Additional wadds are laid in the same way, the leggett being employed at intervals to ensure the wadds are kept in line as work proceeds.

A portion of the eave and barge are now ready for the next stage. However before the laying of these courses, or setts as they are sometimes called, commences it is usual to apply a layer of back-filling. This will prevent the wheat reed from penetrating between the battens, and also give a neater finish to the underside. Historically this infill material would have consisted of straw waste, or alternatively a fleeking layer would have been laid. This is however a very rare occurrence nowadays. Approximately half the bunch from the wheat reed holder is gathered in the left arm and transferred to the right. It is then pitched several times on the roof to bring all the butts level.

The first bunch is laid right on the corner to start the course. Whilst still retaining pressure from the left arm, the palm of the other hand is used to dress the butts into the approximate position. The work is lightly secured with a temporary sway, which consists of several strands of reed, and pegged down with iron hooks.

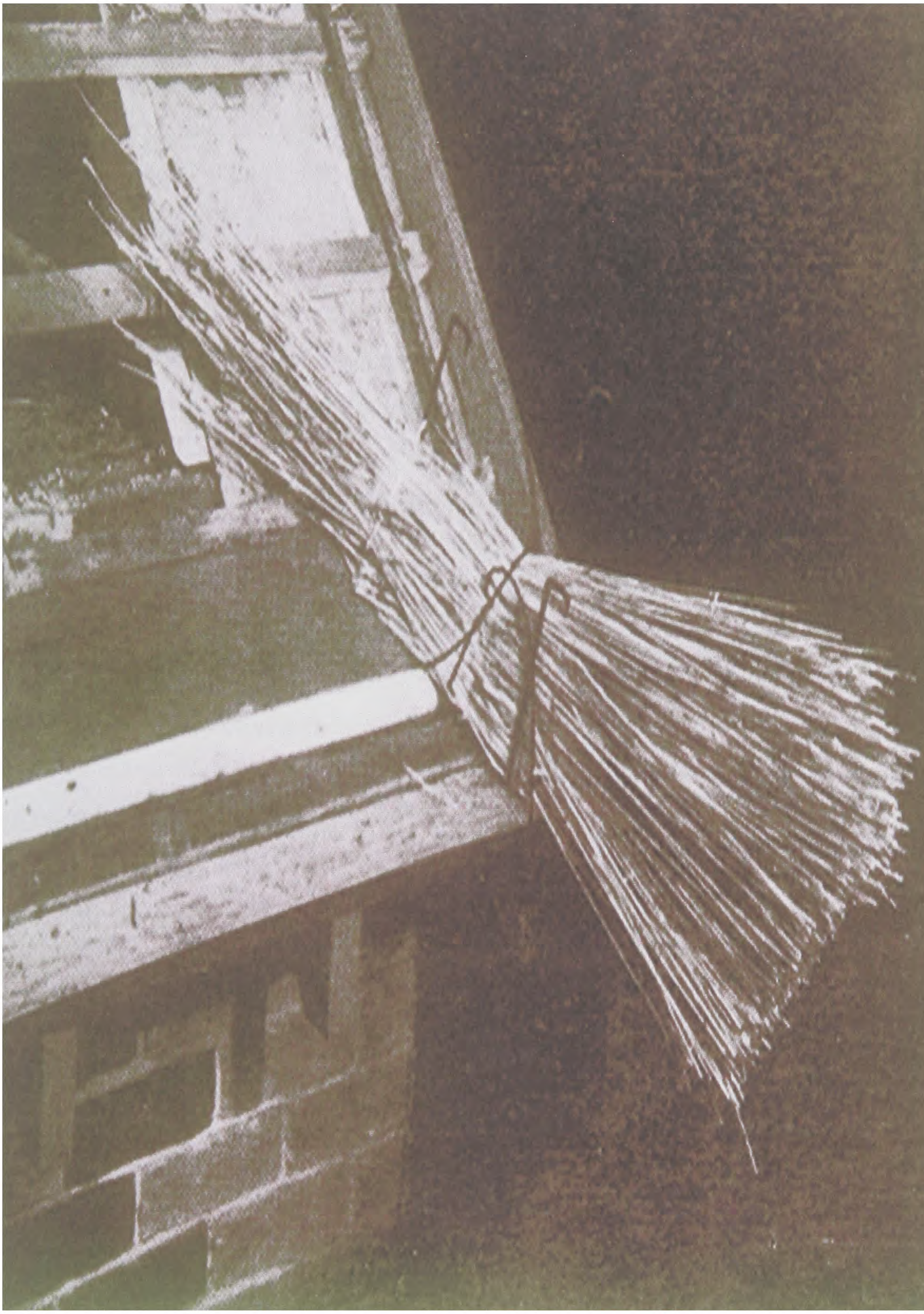


Illustration 50 - A corner wadd fixed in place, the lower end being pushed upwards by the tilting fillet which lies along the length of the eaves

The leggett is used to dress the work to the required shape, whilst each upward drive helps to tighten the face. When a full section of the first course has been laid it is fixed with a permanent sway and the temporary sway is removed. This is done by placing a hazel sway across the course and fixing it to every third or fourth rafter with an iron hook; the rafters are located by pressing the needle through the thatch to find them, and the hook is then hammered home through the thatch into the rafter (see Ill. 51). This method of fixing requires a roof with regularly shaped and placed rafters. Lacking this, the sway is fixed by cord, or the thatch itself may be tied down with cord and even the sways are dispensed with. This cheaper method of fixing is far more common outside Cambridgeshire, which appears to be the main centre for fixing combed wheat reed with hooked sways. Examples of this can be seen on The Hoops public house, No 74 High Street, Bassingbourn (Bs 05), and it is also employed in water reed thatch and long wheat straw. There is evidence of this method being employed in other less common forms of thatch such as heather. The alternative to this method is to secure the wadds of wheat reed into position with tarred cord instead of sways.

The first course is fixed over the wadds with a sway, leaving a generous lip at the top of the course to merge with the next course. When two sways are joined to form a continuous line of sways under which the wheat reed is secured, their thinner ends are secured with two hooks. However, if they are joined at their larger ends, a neater junction is made if the ends are paired down, halving their diameter, and then fixed by a single hook (see Ill. 52). With the sway fixed, further dressing with the leggett will tighten the face of the wheat reed.

Starting from the barge, consecutive courses are set in position, bunch by bunch, held with a temporary sway, and, when a full section of bunches has been laid, fixed with a permanent hazel sway. It is important to make a good join each time a bunch is laid. They cannot be meshed in exactly the same way as the yealms of a long wheat straw roof. Instead, this is done by raising the edge of the course with the left hand and then working in the adjacent bunch so that they will enmesh, right down to the bottom of the course.

Illustration 51 - A hook about to be hammered into a rafter, located by the needle, to secure the sway shown to its left

Illustration 52 - Methods used to join sways using single hooks

An alternative method of fixing the wheat reed, although slower, has the advantage of being cheaper than the method using iron hooks and sways. A curved needle, as used in long wheat straw, is threaded with tarred cord and inserted through the wheat reed to a point below the batten, where it is then manoeuvred to bring the point of the needle to the surface of the wheat reed on the other side of the batten. At this point the tarred cord is removed from the needle and tightly secured with a suitable knot. Each stitch is formed in this way and the procedure is repeated for the next wadd of wheat reed.

Some thatchers prefer this method because the individual stitches grip the wheat reed firmly in bunches and the hazel sway can be dispensed with. The method can only be applied where an open rafter roof exists, and a ceiling that would impede the cord is not directly attached under the thatch. Whilst thatching is in progress it is better that the courses are staggered to obviate the joins occurring in one line. Illustration 53 shows staggered courses with their permanent fixings and temporary wheat reed sways.

Ridges, Caps and Pinnacles

The ridge in combed wheat reed is formed in the same way as in long wheat straw. It consists of the same straw elements, that is three different sizes of dollies or ridge rolls, side courses, and a ridge or capping course.

These elements are all secured using one of the various fixing methods used for long wheat straw, the only variation being the method of preparation. There is a difference in the finishing: in long wheat straw the surface is raked but other than that is generally left untouched; in combed wheat reed the whole surface of the roof is lightly sheared with the shearing hook after the pattern is cut, and this gives the roof a sharper and more angular appearance.

There is a similar variety of ridge types in a combed wheat reed roof as found in a long wheat straw roof, these being a block-cut patterned ridge or saddled ridge, a flush wrap-over ridge and

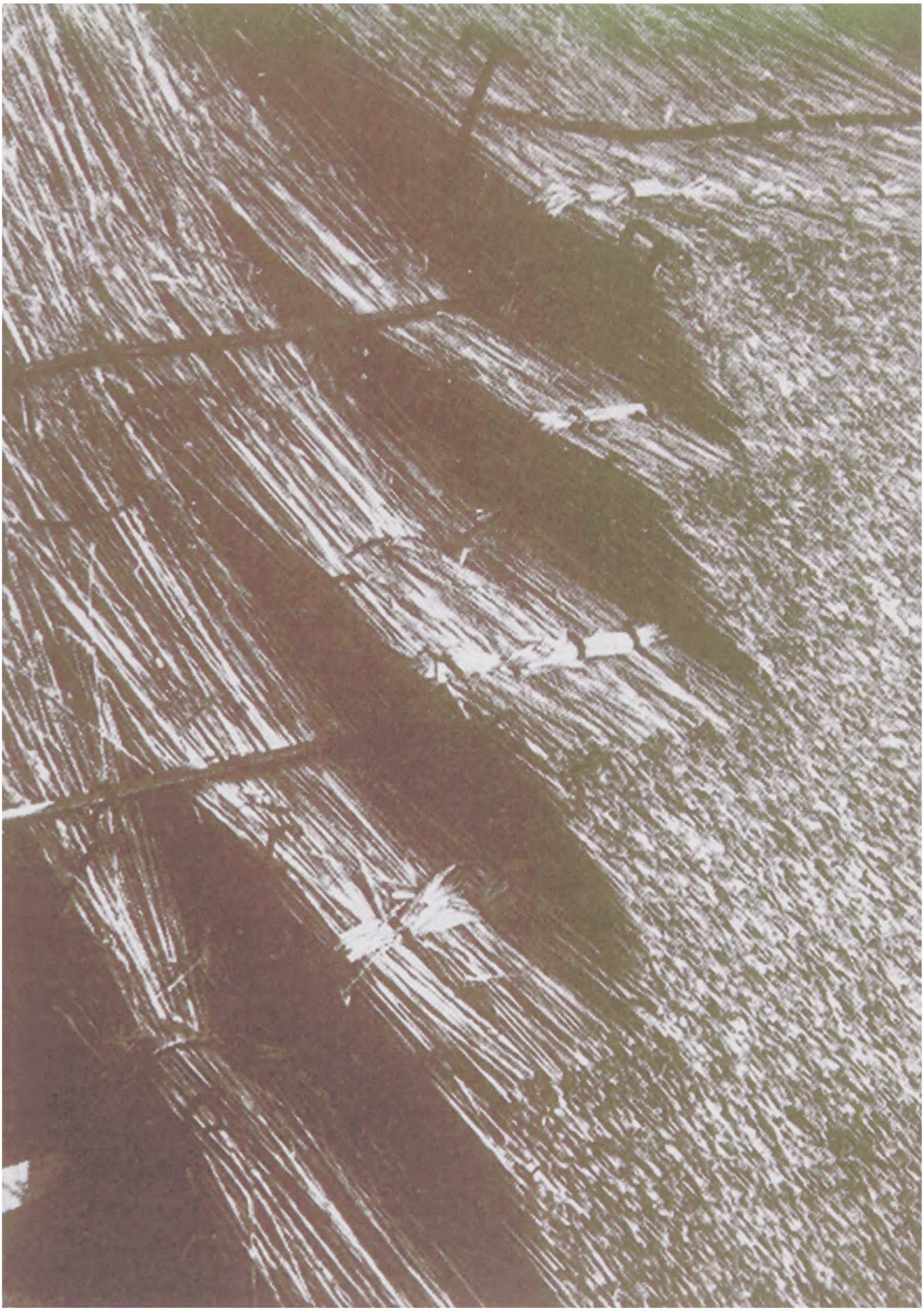


Illustration 53 - Courses or setts, showing how they are staggered a butt ridge to name those most widely found. It is also common to find on both combed wheat reed and water reed roofs a different material used for the capping and ridge courses. This is more often than not sedge, which is laid when it is green and therefore more flexible to apply than wheat reed or water reed, and is also used because it is thought to have a more extended life span than combed wheat reed on the ridge. More rarely water reed is employed for the ridge of a combed wheat reed roof, because, although it is less flexible, it is can last even longer, and it gives an even sharper and more clearly defined shape to the ridge pattern.

Illustration 54 shows the courses cut away to show the ridge in section. The iron hooks hold the sways, which have been sawn through. The total depth of thatch is 450 mm (1.5 ft).

The caps and pinnacles that finish the ridge on a combed wheat reed roof are again executed in exactly the same way as for a long wheat straw roof. The fixing methods employed can be any one of those already described, all of which are satisfactory, and the choice is dependent simply on the personal preference of the particular thatcher carrying out the work.

Hips, Half Hips and Valleys

The wadds are laid again in exactly the same manner as the yealms on a long wheat straw hip, and again fixed in the same way. An unusually excellent example of a half hip in combed what reed is at No 29 (Church Farmhouse) Church Street, Willingham (Wi 02).

The same methods of thatching valleys are again employed for combed wheat reed. There is, however, an additional tool employed during the thatching process, this being the leggett, which is used to dress the wheat reed into position, thus giving it a distinctive sharp and angular look, unlike long wheat straw, which appears more rounded.

Illustration 54 - The formation of a ridge

Chimneys

The straw rolls and thatch materials are laid in exactly the same way as for long wheat straw. This also applies to the trimming of the apron and the pattern of the liggers, which are fixed in whatever way the individual thatcher prefers.

Dormer Windows

The techniques employed for the gabled dormer use all the standard methods for placing and securing the thatch material to the roof structure found on the main roof and on gables, ridges and valleys.

The eyebrow dormer window however is, once again, treated differently, using the same methods as are used in long wheat straw, except that the leggett is employed to dress the wheat reed into position. This produces the distinctive sharp angular shape associated with combed wheat reed roofs.

There are many variations in the thatching of this window type throughout Cambridgeshire, a consequence of the various personal styles of the individual thatchers. A good example of this diversity can be found at No 8 High Street, Orwell (Or 05), where the relationship between the eyebrow dormer window, the thatch that covers it, and the rest of the roof seem to be particularly well proportioned.

Re-thatching

Where a roof is in need of re-thatching, it is normal in Cambridgeshire to see the old thatch stripped completely from the existing roof structure. Thatchers prefer to start with a regular base so that the shape of the roof structure is reflected in the characteristic sharp and angular shape of the combed wheat reed thatch itself. This cannot be readily achieved if the old coat is partly left, because this will tend to smooth out the angles.

Nevertheless, very occasionally, the roof may be only partially stripped, and a new coat of combed wheat reed is applied. This technique, known as spar-coating, just as it is when applied in long wheat straw, is again similar. A spar coat, however, is only used when the basic roof structure is so irregular that it needs to be regularised by using the old base layer as a form of filling. Otherwise, there is no saving in either labour or materials. It is essential, even so, that the existing thatch be stripped down so as to leave a tight base of at least 250 mm to 300 mm (10-12 ins), and more where the irregularities in the roof demand it. A far better job will result if the old eaves and barges are also stripped right down to the roof structure completely and new wadds secured in the way already described.

The main course work in reality constitutes a new coat laid over the old underlying thatch. The remainder of the work is secured in the same way as new work. Sometimes it may be necessary to strip the old thatch from an irregular roof completely because it is too decayed, thereby leaving no base into which to spar the new coat. In this case the remedy is to sew on what is sometimes referred to as a waistcoat (see Ill. 55). This is an under-layer which is roughly thatched on to the battens to a minimum thickness of 200 mm (8 ins), more to fill undulations, and for which second-grade wheat reed is used. A weathering coat of new wheat reed 200 mm (8 ins) thick is then sparred down into this in the usual way.

Illustration 55 - A waistcoat layer

Chapter 5 - THATCHING METHODS

Part 3 : Water Reed

Water reed is the finest thatching material available today. Upon its arrival on site, traditionally already bound by the fenmen in bundles, or, in local parlance, wadds, of standard size, the majority of thatchers will immediately grade the reed. This will considerably facilitate the work to be done. Each wadd is butted on the spot board and graded according to its length and quality. The wadds are laid in three separate groups, long and fine, short and fine, and coarse. They are then ready to hand as required.

A simple method of carrying is used whereby a small handful of reed is taken from a wadd and bent forward to form a grip. According to choice, a total of four, six or eight wadds can be placed in this grip (see Ill. 56). A load can then be hoisted on to the shoulder using the grip. This leaves the left hand free to assist in scaling the ladder.

Methods of fixing the wadds to the eaves vary, but in general throughout Cambridgeshire they are tied with tarred cord. A staple may be used to secure the tarred cord in the first instance (see Ill. 57). Other methods for fixing the material to the roof structure are the same as used for combed wheat reed and long wheat straw.

A well-shaped and tapered wadd is picked to start the corner of the roof. The butt-ends, which will be exposed to the weather, are then shaped up to form a bevel by dropping them at an angle on to the spot-board. This wadd is then placed at a 45-degree angle across the corner in exactly the same way as the corner is started in combed wheat reed or long wheat straw. It is then secured with the tarred cord, the bevel following the approximate eaves line. Iron hooks are used as a temporary measure to keep the work firm (see Ill. 58).

The fundamental difference between tying water reed and tying long wheat straw and combed wheat reed is that, in the case of water reed, the tarred cord is wrapped twice round the batten,

Illustration 56 - A reed grip in use

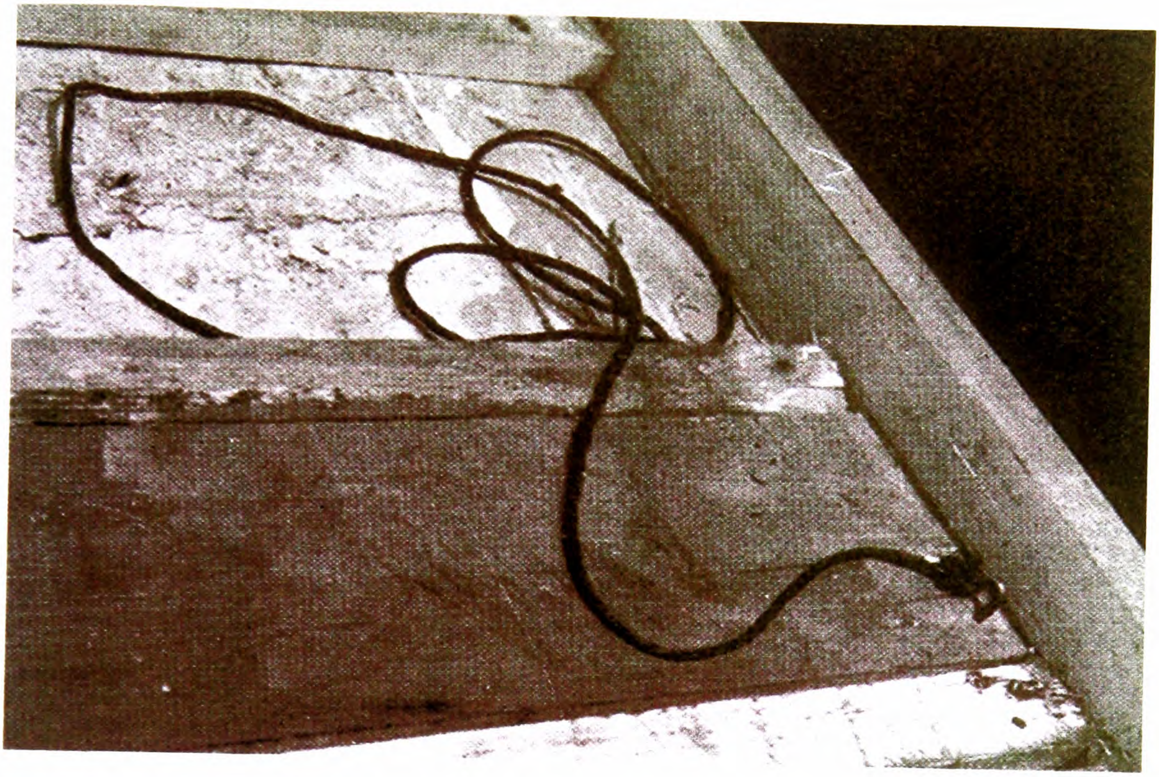


Illustration 57 - Metal staple and tarred cord.

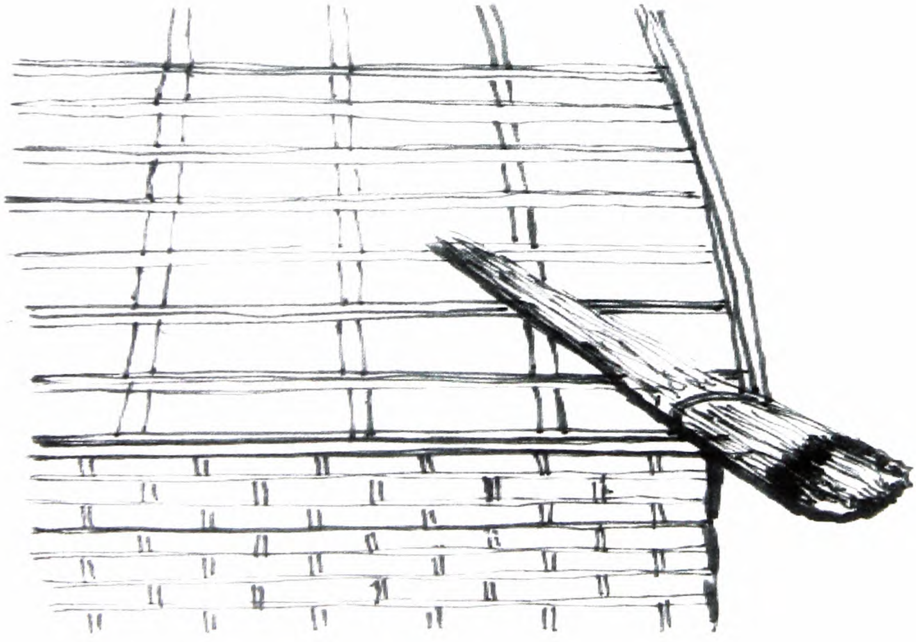


Illustration 58 - Diagram showing the initial wadd of laid water reed before being wrapped twice around the wadd. This is done to give the additional grip required by the cord, counteracting the waxy coating of the stem. This coating, in comparison to the coating of combed wheat reed and long wheat straw, is important; it tends to increase the longevity of the reed, but it also makes it rather slippery. With long wheat straw and combed wheat reed the cord is wrapped around the batten and straw element only once. Tightly wrapping the cord twice around the wadds of reed prevents it from slipping and securely holds the wadds.

It is important to note that the tension of the cord bends the wadd of reed towards the rafter at its centre (see Ill. 59); this is aided by both the tilting fillet and the raised barge boards at its lower end. The leggett is now used to dress the wadd into the required position, precisely determining the level of the eaves. The leggett strikes the reed in a series of upward drives which further tightens the wadd in the cord. More eaves wadds are added in quick succession using the same tying method. Illustration 60 shows how the direction of the wadds gradually changes from the diagonal to the vertical, corresponding to the line of the rafters, as the thatcher moves away from the corner towards the centre.

The gable is formed by laying medium or short wadds at 45 degrees overhanging the barge board, following exactly the same principles employed in combed wheat reed and long wheat straw. With the eaves and gable wadds in position, it is necessary to back-fill the void created over the small, upper end of the wadds. This is done by tucking the butt ends of a small handful of coarse reed behind the tops of the fixed reed in a corresponding direction (see Ill. 61). This operation continues in stages over the whole of the roof and fulfills several functions. It creates additional tension in the fixings of the reed, and prevents the tops of subsequent courses driving between the battens. This fill material in the past would have ensured a neat and tidy appearance from within, allowing a reasonably even base onto which could have been applied a lime plaster coat completing the interior finish.

The brow course is a course of single wadds that completes the thickness of the eaves course and determines the final thickness of the thatch surface. This is an additional course not found

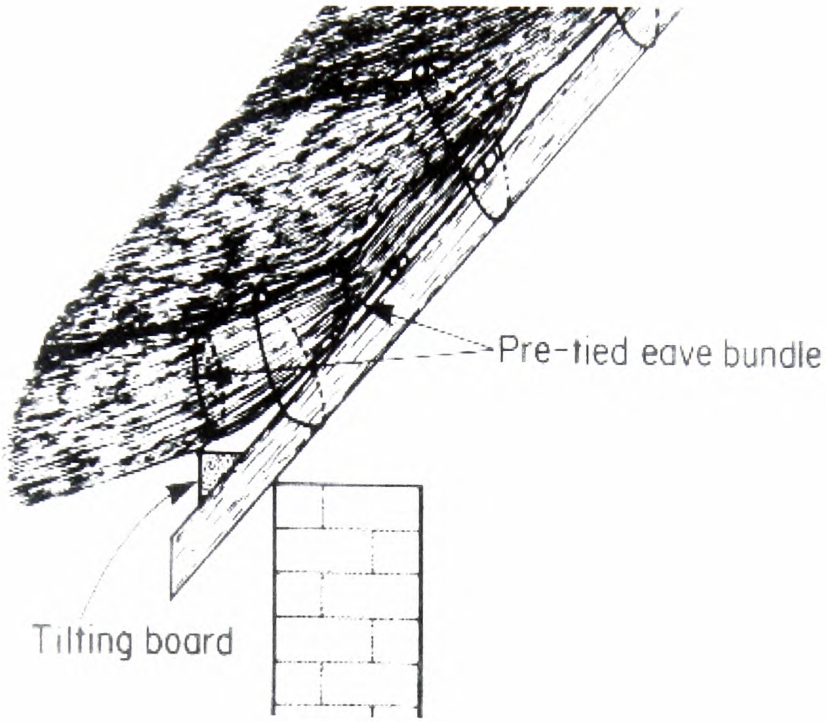


Illustration 59 - Diagram showing how a tilting fillet creates tension

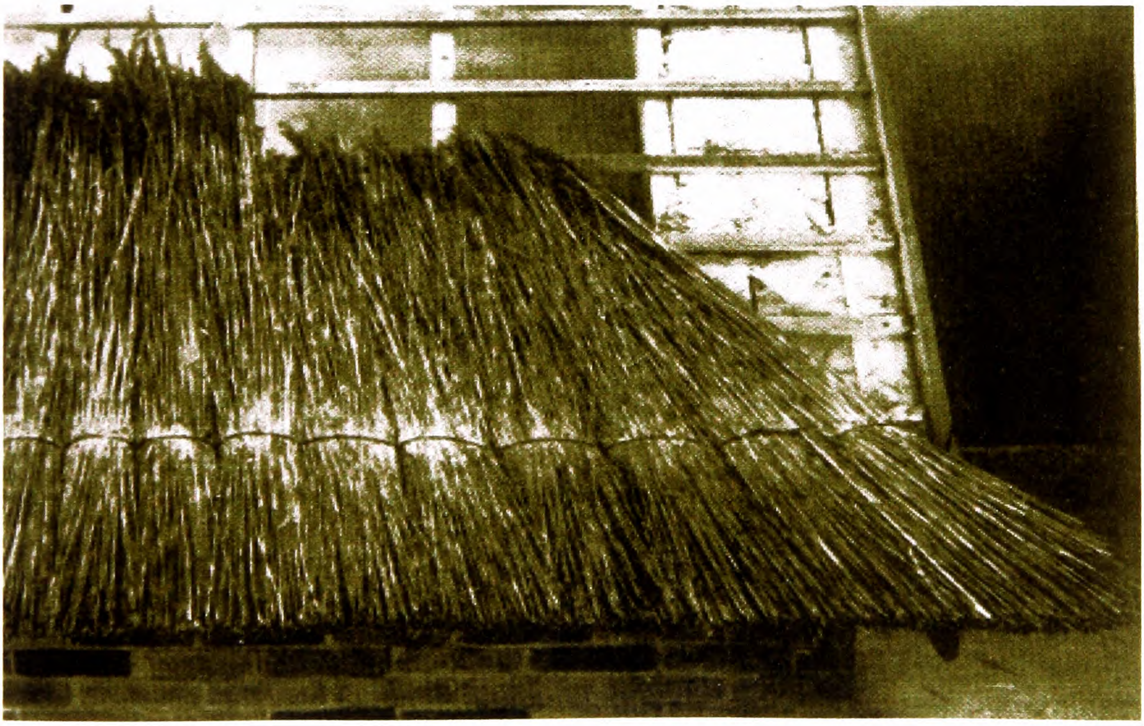


Illustration 60 - Direction of the wadds

Illustration 61 - The back-filling method in either combed wheat reed or long wheat straw. This brow course also occurs on the gables and hips of a water reed roof. This wadd is selected and laid across the corner, following the same direction as the reed beneath. Two needles or pins are used to maintain a square edge to the course after the bond is cut. The ends of the wadds are dressed roughly into position with the palm of the hand, whilst the opened wadd is held in place with the left forearm.

A light fixing method is now used. This involves a small quantity of reed being placed across the course, which is then firmly pinned down with iron hooks to the tight reed below. This element is known as a temporary sway and is later removed. The brow course is dressed into position with a leggett, leaving a small quantity at the top not dressed. This will mingle with the course above and prevent the join showing.

Illustration 62 shows the brow course partly laid. It is important to note how this course has determined three measurements. These are: (i) the distance from the external tip of the eave to the eave board, approximately 350 mm (1.2 ft); (ii) the thickness of the thatch overhanging the barge board, approximately 250 mm (0.8 ft); and (iii) the thickness of the thatch coat from the face of the battens to the reed surface, approximately 300 mm (1 ft).

The brow course is fixed into position with hazel sways. These are first held in position by temporary sways and hooks, which are driven into every rafter, the portion of temporary reed sway being removed before the next course is laid on top (see Ill. 63). The first full course is started in the gable and is lightly dressed into position with the hand.

Illustration 64 shows the start of a full course with the straight line to the gable emerging. This is procured by dressing with the leggett. The position of the pins should also be noted as these keep the new course running in the same direction as the course underneath.

Illustration 65 shows a portion of a full course together with the gable secured with a temporary sway. This also illustrates the square gable taking shape as the work proceeds. The distance from the external tip of the eaves to the wall is of great significance, as it not only ensures that

Illustration 62 - A brow course fixed with temporary sways and hooks

Illustration 63 - The same roof (as in Ill. 62) showing on the extreme right the next course and to its left the temporary sway removed and permanent sways secured into position

Illustration 64 - The line of the gable

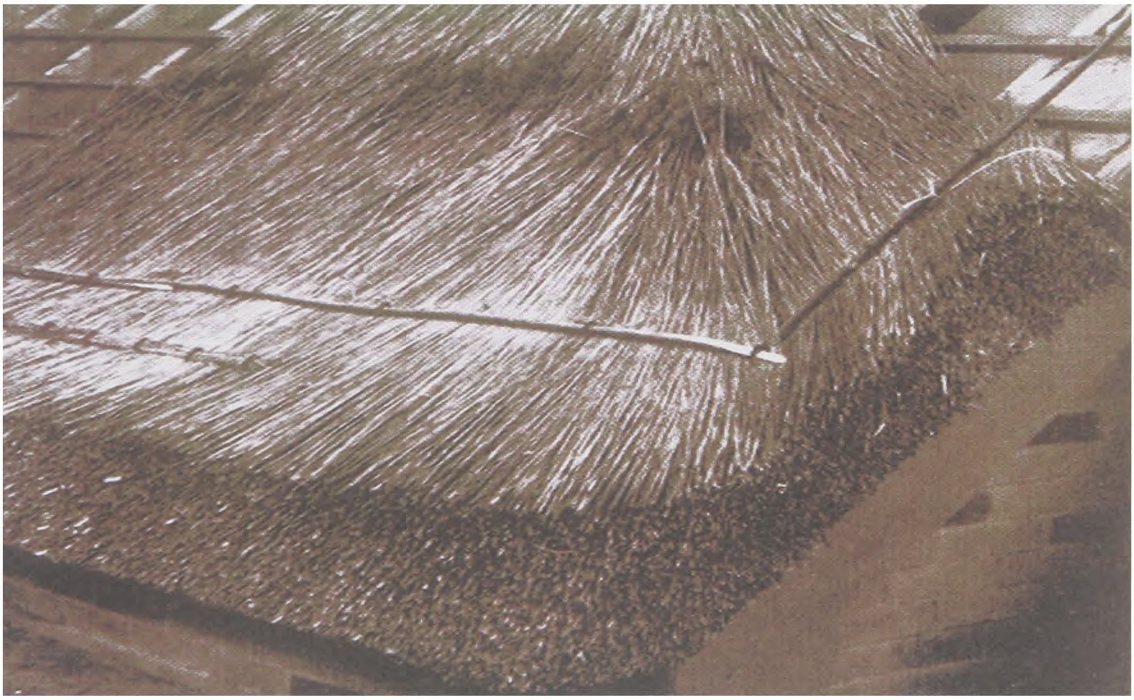


Illustration 65 - The first full course and gable sway water drips well clear of the wall, but also provides balance and character of design. This overhang may be increased or reduced in relation to the height of the building, and also the pitch of the roof.

An alternative and equally effective method of fixing the hazel sways is by stitching them to the roof battens with tarred cord as shown in Illustration 66. One length of the tarred cord is secured to the sway, whilst the other end is threaded into the stitching needle.

The needle is then inserted into the reed at a suitable point, where it appears immediately above the batten. The cord is removed from the eye of the needle by an assistant who works from inside. The needle is then withdrawn to the outside. The needle is pushed through again, this time at a point just below the same batten, whereupon it is re-threaded with the cord. The outside operator withdraws the needle, complete with cord, which has now passed round the batten in question. Illustration 67 shows the tied-in eaves wadds, the brow course and the first full course swayed down.

Ridges, Caps and Pinnacles

The formation of the ridge on a water reed roof is exactly the same as that of a combed wheat reed ridge or long wheat straw ridge with the exception of a lining course. This is an additional element unique to water reed, aiding the longevity of the ridge element by adding an additional layer. The origins of this additional layer to the ridge of a water reed ridge are lost in the mists of time, and today it is laid as a matter of tradition.

The lining course also reinforces the ridge and increases its weathering qualities leveling up the hollow on either side of the ridge after the side courses have been laid. A small roll is fixed with spars, which are driven firmly into the larger roll beneath. This has the effect of reducing the apex to a very narrow line and simultaneously provides a solid base upon which to lay the final, outermost layer of the ridge or capping course.

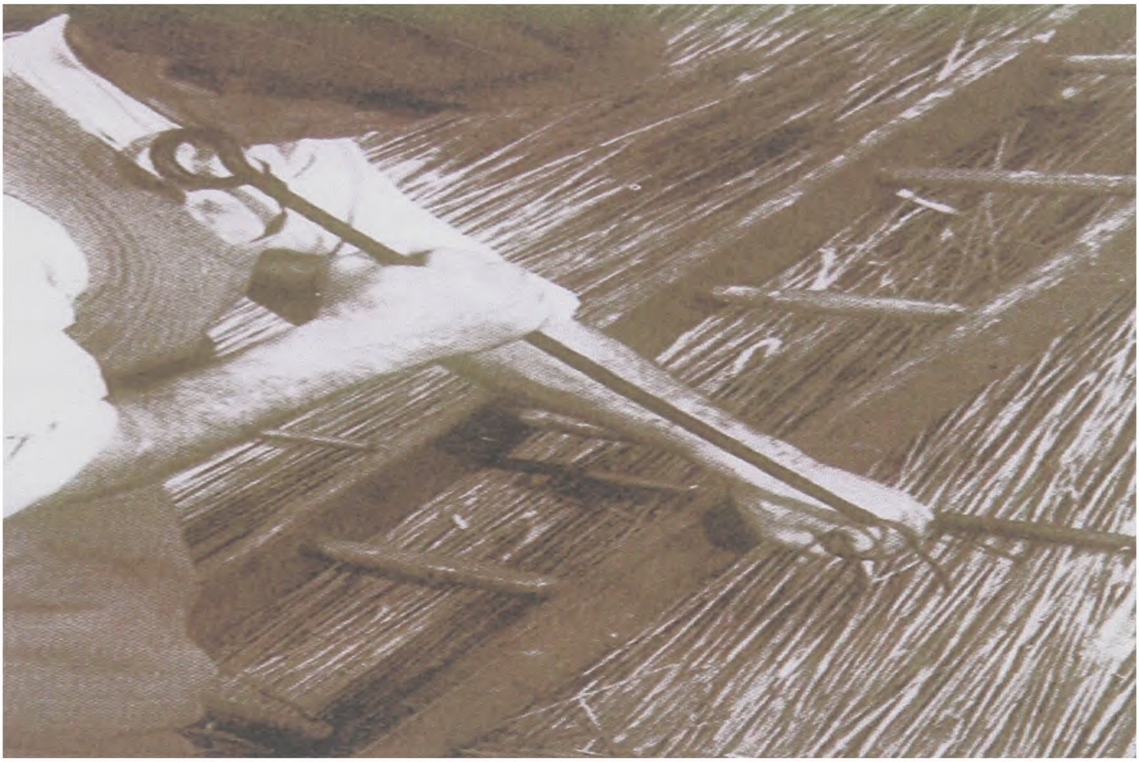


Illustration 66 - Hazel sways being stitched to the roof rafters using tarred cord

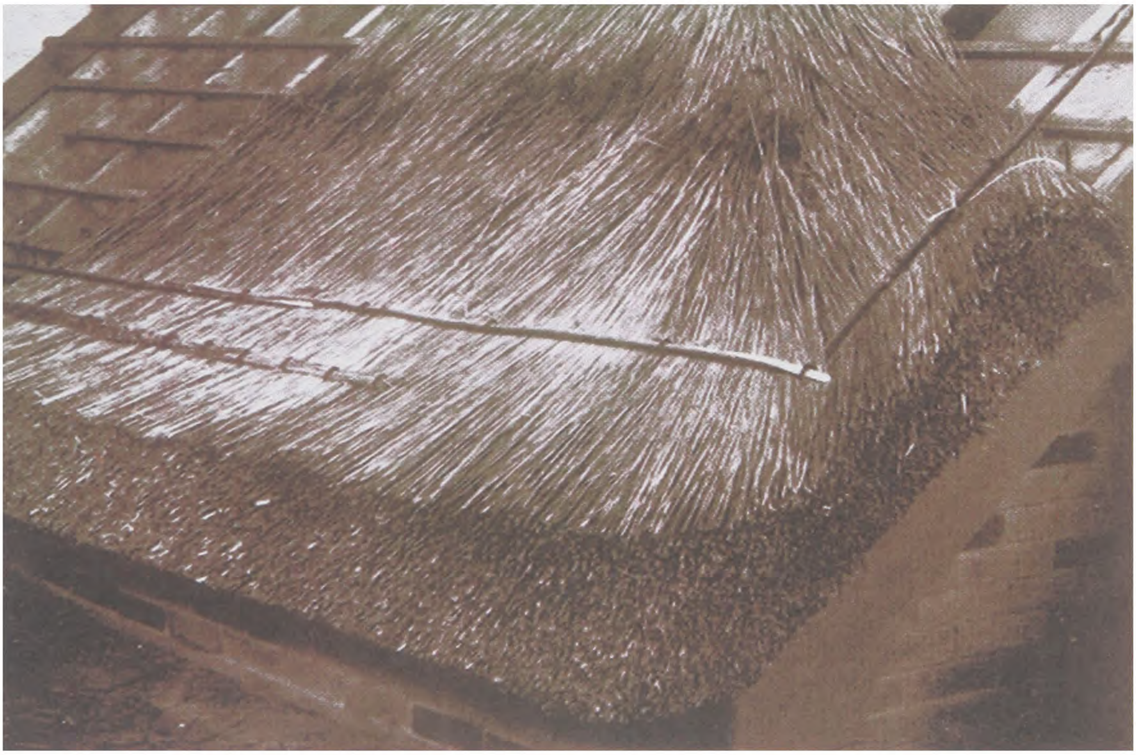


Illustration 67 - A full course with sway fixed with tarred cord

The thatch material for the ridge of a water reed roof is usually sedge. This material is used because it is thought to be more durable and flexible than water reed in this location. This may be debatable, but sedge does appear to last longer than reed in this position, although the reason may be more to do with the additional element of the lining course. Sedge is apparently never used on the ridges of wheat straw roofs, but it would be interesting to experiment with it on such a roof in order to make a comparison and discover whether its longevity is real or just supposed. Occasionally one will find that water reed has also been employed for the ridge material, but this is in the minority. If the sedge has become dry and hard it should be treated in the same way as long straw, by shaking it into a bed and at the same time applying plenty of water. Ideally the sedge should be left to soak for twenty-four hours, after which it can be drawn and yealmed in the fashion of long wheat straw for use on the ridge.

The formation of the caps and pinnacles in sedge is done in the same way as in combed wheat reed and long wheat straw. These are secured as with the ridge by a series of liggers, which are usually arranged to form a characteristic pattern.

Re-ridging

Periodically a water reed thatch roof will need ridging. Having stripped off the old ridge, the entire roof area is redressed and cleaned down with the leggett by removing the moss that may have grown on that part of the roof with a northerly aspect. Any holes that have appeared in the main roof can be repaired by drawing down the reeds around the affected area and inserting wadds of new reed which have been shortened to the appropriate length. The old and new reed is then dressed in together, level with the main coating.

It will be necessary to fix a new reed ridge roll to the apex of the roof, after which the new ridge course can be applied, using a quantity of sedge. The whole roof area should then be lightly dressed together with the eaves and barges. The roof is then rewired with a 19 mm (3/4 in) wire mesh netting.

Hips, Half-Hips and Valleys

The wadds of water reed are laid again in exactly the same manner as the yealms on a long wheat straw hip and half hip, and fixed with one of the methods already discussed.

The same methods of thatching valleys are again employed for water reed. The only difference is that with water reed a leggett is employed, as it is for the rest of the thatching process in water reed. This is used to dress the water reed into position, thus giving it its distinctive sharp and angular appearance, not unlike that of a combed wheat reed roof.

Unlike a roof thatched in long wheat straw or combed wheat reed, the additional course, known as a brow course, which is applied to the eaves, is also applied to the barges and to the eaves of both hips and valleys, immediately after the initial wadds are tied to the roof structure at eaves level. This is like a half course in its thickness and sets the angle of the reed stems that are laid over it. The purpose is to adjust the angle of the reed stems at the eaves level of a hip or valley so as to improve the water-shedding qualities at this otherwise vulnerable position.

Chimneys

Rolls of water reed are laid in exactly the same way as straw rolls at the base of a chimney-stack in a roof of long wheat straw or combed wheat reed. The trimming of the apron and the pattern of the liggers is again much the same, and these are fixed in whatever way the individual thatcher prefers. The one difference between water reed and wheat straw, commonly found throughout Cambridgeshire, is that the material used to form the apron is normally sedge, just as it is for the ridge.

Dormer Windows

In Cambridgeshire the two types of dormer window, the gabled dormer and the eyebrow dormer, are thatched with water reed in much the same way as they are in wheat straw. The techniques employed for the gabled dormer use all the standard methods for placing and securing the thatch material to the roof structure found on the main roof and on gables, ridges and valleys. Again it is common to find in Cambridgeshire sedge being used for the courses that form the ridge. The eyebrow dormer, however, is once again treated differently, using the same methods as are used in long wheat straw, except that the leggett is employed to dress the water reed into position. This produces the distinctive sharp angular shape associated with water reed roofs as opposed to the rounded effect of long wheat straw.

There are many variations in the thatching of this window type throughout Cambridgeshire and adjacent counties, a consequence of the various personal styles of the individual thatchers. This diversity, nevertheless, must always satisfy the need for a well-proportioned relationship between the eyebrow dormer window, the thatch that covers it, and the rest of the roof.

Cutting & Dressing

A skilled thatcher will carefully form the require angles to the eaves, hips and gables, by skillful use of the leggett when dressing the courses. This will reduce the amount of cutting and trimming he has to do to the final roof to produce a clean sharp line to the thatch that we associate with water reed.

Otherwise cutting and trimming is carried out with exactly the same knives and shears used in combed wheat reed and long wheat straw, employing the same cutting techniques and methods.

Chapter 6 - AN ANALYSIS OF THATCHED ROOFS IN CAMBRIDGESHIRE

This chapter will discuss the constituent elements of the thatched roofs found in Cambridgeshire and the materials from which they are made. It will analyse the distribution of the three main materials used as weathering coats in Cambridgeshire, and attempt to account for them. It will attempt to establish the longevity of the most common weathering coat, namely long wheat straw, and analyse the reasons for this, and set the conclusions in the context of what is known of the longevity of other materials, particularly water reed, and also of similar materials as used in other parts of Britain.

Base Layer

Despite what is understood about the weathering coats of the county as they appear today, it is impossible to be precise about what weathering coats were employed in the late Middle Ages because these have all disappeared. Where the underlying or base coats are concerned, the problems of investigation and interpretation are somewhat different, because a few fragments do indeed survive.

It is possible to gain some idea of the nature of the base coat by examining the underside of the thatch at the eaves. The eaves thatch can be renewed, so it is therefore necessary to view the underside to some depth. In by far the majority of cases, where this inspection gave a result, the base coat comprised thatching waste. This poor quality straw was taken from the fields after the harvest had been gathered or it was straw that had been damaged in the thatching process and was therefore unsuitable for use as a weathering coat. The base coat usually predated the weathering coat, evidence of the general practice of laying a new weathering coat over an old base coat. The precise age of the base coat, however, was not determined, since this is generally impossible without detailed scientific analysis. This might have been possible by analysing what specific crops had formed each individual base coat, but the specific botanical knowledge to make this possible was not available. (This knowledge was available to John Letts in his account of thatching in Devon - Letts 1999).

Wherever access to the roof space was permitted, the fleeking and base layers of thatch were examined in even greater detail and recorded together with the estimated age of the thatch and its condition. This investigation of the underlying layers of thatch occasionally revealed many different materials, including bracken, heather, sedge, reed, and grasses, which are often mixed in with threshing waste. All of these materials have been found in the underlying layers of thatch to a greater or lesser extent, and were invariably covered by successive weathering coats that in many cases seem to have lasted for some centuries. Other materials that have been employed are willow shoots, hazel rods and nettles, these having been found in the underlying layers of thatch on utility buildings such as barns and storage buildings. Two examples of this occurrence are the summer house at Bassingbourn. (Bs 03), and No 24 Riddy Lane at Bourn (Bo 01).

This information only confirms what the less detailed examination at eaves level had already shown. However, one major discovery did come to light. In nineteen cases there was evidence of not only a wide variety of materials mixed in with the straw waste but also a coating of soot on the underside of the base coat. This so-called smoke-blackened thatch is the consequence of the former existence of a fire burning in an open hearth below. In short, this is evidence for the former existence of a medieval open hall. The smoke-blackened base coat must therefore date back at least to the sixteenth century and perhaps even further back still.

Smoke-blackened thatch was encountered in most parts of the county (see Ill. 68) and there seems to be no discernible pattern in its distribution. It is nevertheless the case that it is only encountered where the weathering coat is of long wheat straw, because this is re-thatched without disturbing the base layer. While there may be smoke blackening of the timber roof structure in roofs thatched in combed wheat reed or water reed, their base coats are usually removed at re-thatching, so that evidence of a medieval open hall is confined to the roof timbers.

John Letts (1999, Fig. 50) shows a concentration of smoke-blackened thatch in Devon, where he sampled fourteen examples out of an estimated total of some 200-300 examples. Extending

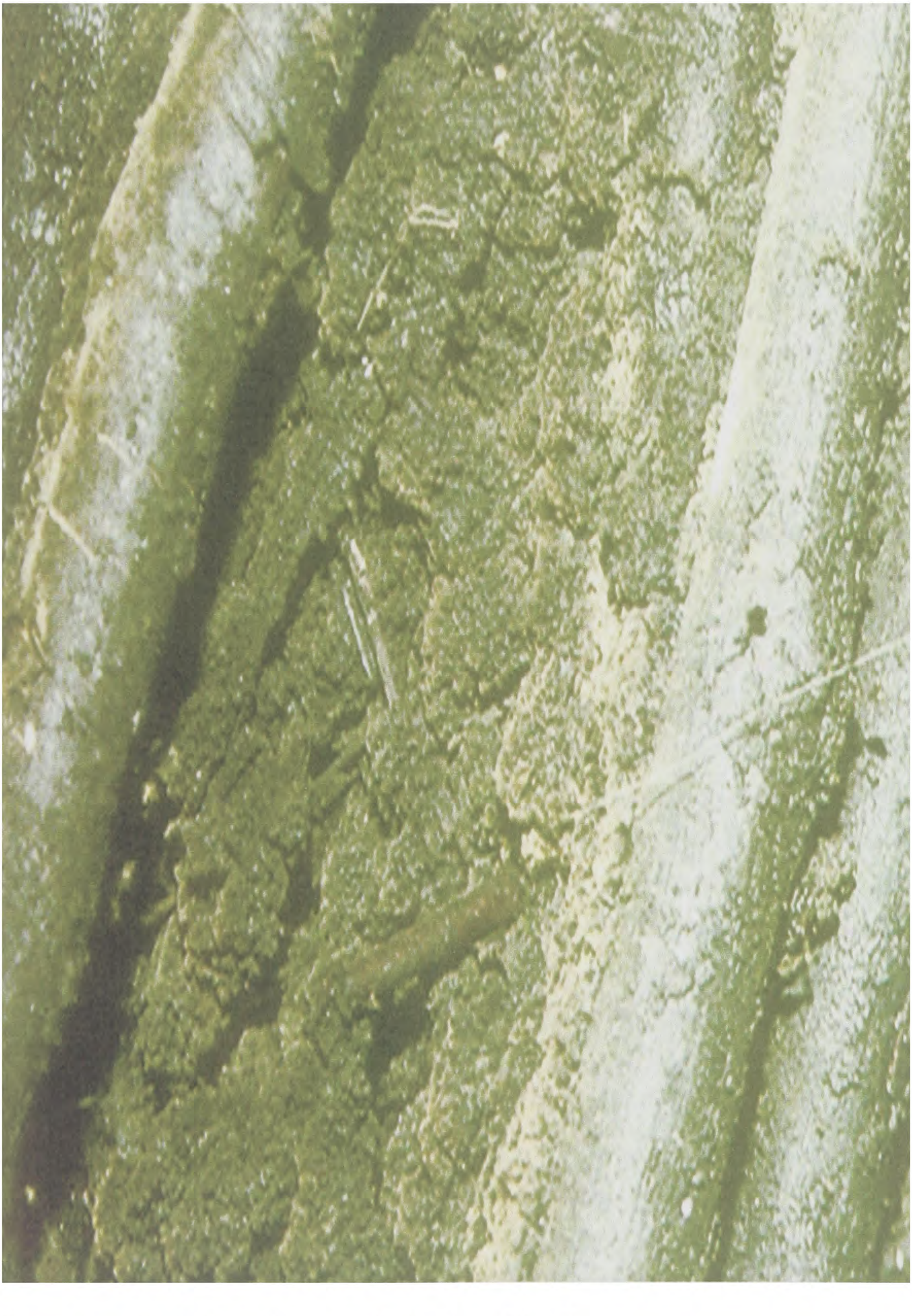


Illustration 68 - A formation of smoke-blackened thatch north-eastwards across England, he reports five to ten examples each in Somerset, Wiltshire, Oxfordshire and Buckinghamshire; and less than five each in the neighbouring counties of Dorset and Hampshire, and Gloucestershire, Northamptonshire and Cambridgeshire. The novelty of this discovery suggests that these figures are far from a complete record of what survives, particularly now that nineteen examples are known in Cambridgeshire as a result of the survey undertaken for this thesis and from personal communication with Cambridgeshire thatchers (see By01, Co11, Fo10, Ga10, Ga02, Ga03, Gc01, Gw01, Ha02, Hi01, Hr01, Li01, Ln01, Ln02, Mb35, Sc03, Sc08, Sm02, Wd13). This significant increase in the numbers of medieval houses that have been found in Cambridgeshire by this particular means is in line with a more general increase in these numbers found more widely in England.

It is therefore too early to reach many conclusions. The survival of smoke-blackened thatch must relate to the number of medieval houses that survive in each county, to how far these were thatched initially, how far these have not been improved in any way, and how far these have not been re-roofed in a different material, such as tile or slate, or of course water reed. What is clear is that a full search for smoke-blackened thatch has much potential. The two volumes of the RCHME (1968 and 1975) found about twenty medieval houses in their two respective areas, but, of these, all but the Royal Oak at Barrington (Ba 07; RCHME 1968, Barrington [20]) have tiled roofs today. Nevertheless, the discovery of nineteen examples of smoke-blackened thatch not only increases the number of known medieval houses in Cambridgeshire, but also highlights the possibility of the county having far more survivors than once was thought likely. Interestingly, the village of Foxton, which is known for the large number of very late medieval houses (ie of late sixteenth-century date, and still initially built with open halls), was surveyed in detail, but without permission to view the base layer. Consequently, not one example of smoke-blackened thatch is known there, although there is a strong likelihood that several examples survive.

The distribution and density of the materials used as base layers cannot be determined with any accuracy because not all of the surveyed roofs were fully open to their internal voids, and several owners of the various properties surveyed in detail would not allow access to the roof void at all. Letts's surveys and subsequent analysis has shown that various types of extinct cereal crops provided straw for these medieval roofs, thus confirming both their age and their potential for future research.

In the case of those roofs thatched in long wheat straw, all of those which were fully surveyed were found to have at least one surviving layer between the weathering coat and the base coat and some have more. The general make-up of these roofs showed that the base layer mostly consists of a layer of fleeking over which is laid a layer of straw waste. Historically this would have been the waste straw produced by the threshing process in which the ears of the wheat had had the grain removed by the threshing drum. The straw was then stooked in bundles in the field to be dried in the sun before use.

It is also possible to confirm the fact that the majority of the surviving housing stock thatched in long wheat straw have all the semblance of having been built for peasant farmers and farm labourers (see Chapter 1). Such houses are generally of two or three bays, often with a lobby entry and a single chimney-stack heating two rooms, and they are of only one main storey, with a second storey wholly or partly in the roof in the form of an attic or garret and lit by dormer windows. The grander houses in the area were built by men of greater status, such as important yeomen, rural merchants and lords of the manor, to a higher standard of construction and decoration and consequently may at first have been thatched in other materials such as water reed, but are mostly now roofed with tile.

The fact that the straw waste in the base layer is shorter in length than that of the weathering coat is of no real consequence. This is because it is never exposed to the weather and always covered by at least one weathering coat of thatch. The only requirement for length is that this should be enough to enable the mid layers and the weathering coat to be securely fixed to the roof structure.

The survey showed conclusively that in the majority of cases when re-thatching a roof of long wheat straw, the weathering coat was, and still is, the only coat to be replaced. The remaining underlying layers remain untouched, and are usually of straw waste. This may be because the person who undertook the re-thatching was probably a farm labourer or a cottager with enough skill and experience to enable him to be responsible for the maintenance of the roof. His motto may have been 'if it works, don't touch it.' Perhaps, after a long day bringing in the harvest, he applied his skills as a thatcher to the securing of another coat of thatch over the existing coats, thus minimising the complexity of the task before him. In fact, if the underlying layers have not deteriorated there is no need to replace them, and the weathering coat may readily be bound to them securely. The simple response proved to be the most expedient and efficient. This conclusion is borne out by the survey, which shows that of the 235 long wheat straw roofs that were surveyed, 100 were found to have base coats of thatching waste.

This practice of re-thatching over an undisturbed base coat, and even a weathering coat (to produce an intermediate coat) led to layer upon layer building up successively with every re-thatch to such an extent that in at least a few cases the roof structure collapsed. A notorious case of this occurred at Sheep's Head Row, High Street, Melbourn (Mb 27), which had five layers of thatch over its base coat at the time of the collapse. (At one time, incidentally, this aptly named row was inhabited by Mr and Mrs Bull, Mr and Mrs Cow, and Mr and Mrs Lamb.) The evidence of progressive re-thatching, suggested by the overall thickness of the layers, is usually clear where the individual layers survive and can be identified. At No. 4 The Moor, Melbourn (Mb 04), and also at 82 High Street, Melbourn (Mb 24), for instance, five layers of straw waste are clearly recognisable beneath weathering coats of long wheat straw. In none of these examples and several others included in the Catalogue has there been a collapse or even the threat of one. The greatest number of layers that a Cambridgeshire Master Thatcher - Mr Osbourne - has told me that he has removed from a single roof during a re-thatch is seven (Or 06), a number that did not include the base layer and fleeking to the roof. This would have taken some two to three hundred years to build up if no layers had been removed at any stage. This build-up is almost a thing of the past as today long wheat straw thatch is normally stripped down to the underlying base layer and the new weathering coat is fixed on to this. The most notable surviving examples of multi-layered intermediate coats are Mb 24, Me 06, Or 06, Ov 02. Interestingly, two of these were certainly roofs thatched by Mr Osbourne, and the other two may also have been. According to D.D. Stanford, Osbourne would always avoid stripping a coat unless it was too badly decayed to remain, seeing no reason to do otherwise: it would be a waste of both time and material.

It soon became clear from practically all of the roofs thatched in long wheat straw that comparatively ancient base coats of straw waste survive beneath them and that these are very rarely stripped off when the roof is re-thatched. This is because the weathering coat usually maintains it in very good condition for an exceedingly long time, indeed to such an extent that the base coat can be shown in the majority of cases to be composed of the original material and secured by the original fixing method and fully intact. In short, the fleeking and base layers are as old as the roof itself.

Some of these base layers in other counties have been scientifically examined and analysed (Letts 1999), the results of which prove the above point. However, this scientific analytical examination was not available during the survey of the individual buildings in Cambridgeshire, and the findings were based on what had been learned of the different thatching materials and the different roof constructions.

I did however have access to some of the more general results of this scientific survey carried out on a small number of roofs within Cambridgeshire (pers. com. John Letts). From these results it became apparent that there are varieties of wheat and rye that had been taken from the fleeking and base layers of the long wheat straw that are no longer available to thatchers today, and many of which are in fact extinct. For example barley was used for a fleeking layer at Shudy Camps (Sc 08), a practice that was probably always rare, and appears to be unique today. The discovery of these particular varieties that were available during the late medieval period is of great importance for dating the particular structures in question. But, although their presence is suspected in many roofs, particularly those that have smoke-blackened base coats, only in the case of Oak Cottage at Litlington (Li 01) have they been identified with confidence (analysis carried out during a joint site visit with John Letts). The base layers were identified as consisting of threshing waste, containing rye, bread wheat, rivet wheat and crop weeds. The fleeking layer contained some patches of what appeared to be water reed, and this could also have been of medieval date.

The dating of medieval timber frames, together with their roof structure and the roof thatch, has now been made slightly easier with the realisation that the accumulation of soot on the underside of the base layer of thatch can now be attributed to the former existence of an open hall. Scientific analysis of this soot encrustation reveals the importance of recording its thickness as a possible means of determining the age of the base layer of thatch, because the thicker the layer of soot the older the base layer of thatch.

At the start of the survey the possibility of finding smoke-blackened thatch in Cambridgeshire seemed to be remote. Only a handful of mediaeval houses had been properly recorded (RCHME 1968 and 1972), and few others, such as those at Foxton, were known by repute (Parker 1975). In Cambridgeshire, as we have seen. the investigations of likely houses revealed that there are nineteen confirmed cases of smoke-blackened thatch scattered around the three areas of detailed examination and in nine other parishes (see addendum to the Catalogue Raisonné). A full survey would surely increase this number substantially.

Moreover, the integrity of the battening and fixings in many of the buildings with surviving smoke-blackened thatch suggests that their base coats are original to the roof structure, and that, like the roofs of the buildings they shelter, they may belong to the fifteenth century or, at the least, to the sixteenth or early seventeenth century.

None of these houses seems to have been of manorial status but had been built for comparatively affluent peasants who had adapted successfully to the agricultural changes at the end of the Middle Ages. The lack of internal embellishment suggests that manorial affectations were not being mimicked by those whose new-found wealth fuelled much of the building of this period, but it is possible that the status of the emerging yeoman class was expressed in a more utilitarian way by the quality and embellishment of the thatch.

All of the buildings examined had initially contained open halls that, in the first century or so of their use, had allowed the accumulation of a considerable build up of soot on their roof timbers and thatch. Given the brevity of the individual surveys, it was not possible to test the depth of soot and hence to attempt an estimate of age, nor was this desirable given a lack of archaeological skill. A similar lack of the necessary skill prevented any assessment of the varieties of straw used in the base coat.

The upkeep of these buildings as modestly affluent residences through the post-mediaeval and early modern periods may be partially responsible for their preservation into the modern day. The quality and size of the construction of these buildings is important because they were well built from the start, high enough to allow the later insertion of an upper floor without disturbing the roof, and any need for enlargement could be encompassed by the addition of extensions at the side or rear.

While the research revealed nineteen examples of smoke blackening in thirty-four parishes without any shadow of doubt, it might be expected that double this number could be found in the remaining sixty-seven parishes. However, failure to gain access to the majority of other likely buildings, both within and outside the areas of detailed examination, leads to the conclusion that the total number of surviving examples of smoke-blackened thatch in Cambridgeshire may well be much greater and perhaps five or six times the number actually found. If this is the case, the number of recognised medieval houses in Cambridgeshire is multiplied several-fold at a stroke. This has implications for the social and economic status of the Cambridgeshire peasantry in the last century of the Middle Ages that relate to such issues as freedom from manorial dues, parish by parish, and overall wealth generally. These issues, however, lie outside the scope of the thesis, just as the analysis of medieval varieties of grain also does.

Another interesting aspect from the detailed survey that revealed itself was the fact that in only a few instances had smoke bays been inserted into the roofs of former open halls. The reason for this is more a result of the research than of survival since the survey was looking for smoke-blackened thatch, not mediaeval or post-mediaeval constructional elements.

Materials: Weathering Coats

The initial data gathered for the 101 parishes of Cambridgeshire recorded with a high degree of accuracy the spread and density of the weathering coats, roof by roof, on 817 individual buildings. The general mass of this data revealed that at present only three materials or, more properly, methods of application are used for weathering coats. These are long wheat straw, combed wheat reed and water reed. Their general distribution is set out in map form (Appendix A, Maps 1 and 2).

Overall, the dominant material and the most widespread is long wheat straw. It predominates in 64 of the 101 parishes. This is an expected consequence of the dominant role of arable farming in Cambridgeshire, and the consequent general poverty of the agricultural community employed on its farms. It is equally clear that combed wheat reed is a comparative rarity, predominating in none of the county parishes. Seven rural parishes have no thatched roofs at all and there are also none in the City of Cambridge. Long wheat straw predominates in the central and eastern parts of the county, although there are seven parishes where there is more water reed, and a further four parishes where reed and straw are more less evenly balanced. To the west of the county, however, there is a block of nineteen parishes where water reed clearly predominates.

This may be a reflection of the pastoral as opposed to arable character of the farming conducted on the heavier clay soils that predominate here, but other reasons may be more convincing. Surprisingly, the majority of these water reed roofs were found to be significantly older than their counterparts of long wheat straw and combed wheat reed (La 09, Ov 03, Ov 07, Ra 06, Wa 05, Ww 0). The reason for this is not entirely clear. Water reed generally has a longer lifespan, owing to its recognised durability. For example, a water reed roof at 30 Station Road, Over (Ov 07), may have lasted a hundred years. The longevity of water reed is nevertheless hard to establish with any certainty due to the lack of available detailed records such as those of D.D. Stanford (Appendix D). This difficulty is compounded by the method of application of water reed. Because the thatch material is nearly always stripped completely from the roof structure, before any new thatch material is applied, only the weathering coat can be evaluated for age. Consequently estimates of its lifespan vary considerably, forty to a hundred years being often quoted, and these accord with estimates made during the survey. All Saints' church at Rampton (Ra 06) has had a roof thatched in water reed for all of the twentieth century, and the longevity of the earlier thatching in that century appears to be between fifty and sixty years. This is a useful guide, although conditions relating to the maintenance of a church's thatched roof may differ from those of a house.

Rampton church has probably been thatched in water reed since time immemorial. Even so, the limited photographic record of this church and also of other roofs more generally suggests that many roofs thatched in water reed within this region have been thatched in water reed for a long time. There are two roofs thatched in water reed where photographic evidence combined with the 1993 survey suggests a significantly long lifespan. These are Co 03, which appeared to be 60-70 years old in 1993, and Wa 05, which appeared to be 63-73 years old. This seems to accord with the opinions of Cambridgeshire master thatchers who in conversation suggest a life span for water reed of 70-75 years.

Moreover, the evidence of regularity in the timber construction of a few roofs of buildings of high status suggests that they were intended for a thatched covering of water reed in the first place, that is if they were not to be covered in tile or slate. This is the case of Rampton church, and also, in significantly rather different circumstances, of the Great Barn at Wimpole (Wm 01), which began life with a slate roof, but is now thatched in water reed. Taking this evidence together therefore suggests that there may have been a tradition of thatching in water reed of some duration, rather than a switch from long wheat straw to this longer-lasting material in recent years.

This begs the question of its origin. Why should water reed appear in this location to such an extent? Although this is predominantly a region devoted to cattle farming, it has always supported a certain amount of arable. While this may have provided straw for thatching, its primary use is likely to have been for litter and fodder. There may, of course, have been plenty of straw available for the far lesser needs of thatching. Nevertheless, the needs of fodder and litter may have raised its cost, and therefore have reduced the difference between this and the cost of water reed. It is only possible to guess at the availability of local water reed. The prevalence of clay in the soil increases its ability to hold water, and this may have led to greater quantities of local reed growing there in the past, for instance in drainage ditches and ponds. Nevertheless, the main source of water reed in Cambridgeshire lies to the north, in the Fens.

According to the Rural Development Commission, the fenland of the Wash and the Norfolk Broads were historically the largest areas producing water reed in the whole country, and this remains the case up to the present day. Recent figures show that they produce some 87 percent of all English reed (RDC 1991). It is therefore a reasonable assumption that a large percentage of the water reed found on roofs throughout Cambridgeshire could have been transported from these areas. So its transportation from these reed-producing areas must be considered. Then there is the wider question. Why did it find its way to these particular locations along the western belt of Cambridgeshire, and not elsewhere?

When the houses of west Cambridgeshire were first erected during the late medieval and post-medieval periods, haulage could only have been along rivers by boat or along poor roads by horse and cart. The river Cam was readily navigable as far as Cambridge, and to a lesser extent as far as Newport in Essex. The Cam and its tributaries could therefore serve the county to the north and west. Only the south-east of the county towards the Suffolk border was far from a waterway. Despite this, roads had to play some part in the journey, even if only towards its end.

Two Roman roads were probably still operable to some extent, one being Ermine Street running from Royston to Huntington and the other running more or less at right angles off Ermine Street at Wimpole in a north-easterly direction to Cambridge and on to Ely. Today these are major routes. Archaeological evidence suggests that this has always been the case. It is a likely assumption that these roads would have been suitable for heavy haulage in the past as they very evidently still are today.

Further to the south-east another former Roman road runs from Thetford in Norfolk across the dry chalk country between Newmarket and Great Chesterford. This did not provide a direct route from the Fens or the Broads, and, while it could have served to transport reed landed at ports served by the Cam, there would have been a long uphill drag for the carts to reach it. Besides, the chalk was historically sheep-corn country and straw was in such good supply, and therefore cheap, that to import reed must have been like taking coals to Newcastle.

How the branches off Ermine Street and the Wimpole-Cambridge-Ely road and other smaller tracks served is hard to determine, but, whether by water or by road, the route from the Fens to Cambridge and Huntingdon, and beyond, seems to have been of greater service to the west of the county than the east. The remaining parishes of Cambridgeshire would not have been so accessible to these major routes, thus water reed appears to have been limited to those parishes adjacent to Ermine street.

Therefore the general picture unfolds. Long wheat straw is the by-product of the arable landscape of Cambridgeshire and found extensively within those parishes that have produced wheat in quantity from at least the Middle Ages to the present day. Many of these parishes lie beyond the economic travelling distance from the major distribution routes, land and water, that allowed water reed to be imported into the north and west.

Straw was the only viable alternative to water reed in these parishes because, firstly, it was readily available, and, secondly, its cost was minimal when compared with water reed. Where there are exceptions in these parishes, it is almost invariably the case that buildings thatched in water reed belonged to those persons who wished to demonstrate their wealth by using a thatching material that more ordinary people would have considered to be exorbitantly expensive. A possible example of this may be the sixteenth-century cottage at 8, 10 and 12

Green End, Landbeach (La 09).

While there may have been enough water reed grown in western Cambridgeshire, and there certainly was more than plenty grown in the Fens, these sources are no longer as productive today. Owing to lack of management of the existing reed beds, together with the improved drainage of agricultural land many beds have become unproductive or have simply dried up and been put to the plough. The consequence of this is that a large percentage of water reed is now imported from Europe to satisfy the growing demand for this excellent thatching material.

Combed wheat reed

There appears to be no distinct pattern in the distribution of combed wheat reed. While it predominated in no single parish that was investigated in detail it does make an appearance in fourteen of these twenty-four parishes. In Willingham (40%), Bassingbourn (34%), Orwell (25%), Melbourn (21%) and Rampton (20%) the proportion is fairly high, but in these parishes, as elsewhere, the appearance of combed wheat reed is relatively new. The earliest appearance of this material seems to have been between 1953 and 1963 (Bs03), and all the remainder of such weathering coats appear to be later than 1963.

Government-sponsored publicity in the immediate post-war period made great play of the superior lasting qualities of combed wheat reed, suggesting that it could last twice as long as long wheat straw (Cox & Thorp 2001, 161-3). No evidence was quoted for this optimistic statement, but the general implication was that combed wheat reed should act as a spearhead in the revival of thatch, and make up for a lack of water reed and at a lower cost. Combed what reed was widely taken up in Devon at this time, and similar reasons may explain its introduction to Cambridgeshire.

The photographic evidence (Cc 06; Mb 11; Mb 23; Mb 36; Or 08; Sh 15, Wi 02; Wi 04) shows that these roofs had previously been thatched in long wheat straw. The reason for the change, other than that suggested above, is unclear, but is possibly due to the aesthetic effect of combed wheat reed's appearance, which resembles that of water reed, combined with a cost that lies about midway between that of water reed and that of long wheat straw. Longevity, despite the claims of post-war publicity, is unlikely to be an issue since there is no more than a marginal advantage over long wheat straw. This is discussed in more detail below.

There is a hybrid form of thatching in which long wheat straw is applied to a roof in the manner of combed wheat reed, but then decorated with liggers (which serve no practical function in holding the thatch down) so as to make it appear as though it is indeed thatched in long wheat straw. This is a curiosity unique to the work of Dodson Brothers. It seems that they developed this technique during the period when combed wheat was first introduced, namely during the1950s, and may have done so for what at that time appeared to be practical reasons. Since then, this has been disputed, and, among other things, has led to Malcolm Dodson leaving the family firm and continuing independently on his own. He did so on the grounds of preferring to apply purist traditional techniques, which he still believes to be superior. Incidentally, the Master Thatchers Association rates his work very highly and in the early 1990s awarded him the distinction of Master Thatcher of the Year.

Despite this, Dodson Brothers are a very commercially minded firm, noted for actively attempting to exploit the full potential of the market. Their distinctive technique was probably evolved as a means of finding work among those with little understanding of the craft by suggesting its superiority and low cost. They looked on askance at Malcolm Dodson's independence as a form of betrayal. Similarly, they envied Derrick Stanford's reputation (until his retirement in1994) as the county's senior thatcher, and preferred to address this by competing with a different technique.

Indeed, there appears to be a general belief among the owners of thatched houses that the thatchers who specialise in water reed are more skilled than those who specialise in long wheat straw. There is, however, no evidence that this is the case. Since it is usual for combed wheat reed roofs to be laid by water reed thatchers, it may well be that owners hope to gain an advantage from this supposed increase in skill by purchasing a roof of greater durability without paying the price of water reed. This is where Dodson Brothers step in. Today, now that there are no Stanfords practising in Cambridgeshire, Dodson Brothers do appear to have the largest slice of the market. What is less in doubt is that those who purchase a combed wheat reed thatched roof obtain the well-groomed appearance of water reed at a lower cost.

Longevity

It is commonly accepted that a thatched roof has poor lasting qualities. When one compares this with a roof of slate or tile it is undoubtedly true: both of these materials may ordinarily last well over a century. Nevertheless, the longevity of thatch is both open to doubt and often greatly underestimated. This is partly due to the secrecy of most thatchers who are generally unwilling to discuss the subject or give details. It is also particularly difficult to gain information from other sources, and what information there is tends to be extremely varied.

Given the generally rough and ready construction of many of Cambridgeshire's thatched roofs it might seem that the prevalence of straw thatch would imply a generally short lifespan. Similarly, given the generally favourable esteem in which water reed is held, estimates of its lifespan appear to be significantly longer, as would be expected.

An analysis of roofs that were thatched and re-thatched ninety-eight times in the twentieth century by members of the Stanford family and three other thatchers is set out as a chart showing the longevity of the thatch in each case. This is set out in graphic form, (Appendix B) showing the longest span on the left and the shortest on the right, with a distinct colour-code that shows the individual thatchers and the catalogue code for each individual property. The thatchers are, namely C.G. Stanford, his brothers Edward Stanford and William Stanford (their father C.G. Stanford senior does not appear in this list as his records are lost), and the youngest generation, D.D. Stanford and cousin Ted Stanford, the others being Malcolm Dodson, Osbourne and G. Bird.

The chart shows both roofs that have been renewed and those that were still in place in 1993. The evidence of those that have been renewed shows that a roof thatched in long wheat straw may last as little as thirty-four years (Fo 02), or as long as forty-five years (Mb 28 & Sh 17). In one exceptional case (Fo 09) the thatch lasted 73 years from 1906 to 1979. The state of its thatch just before it was renewed was not recorded in detail, but it was still watertight. When the single exceptional case is removed from the overall picture, a more realistic valuation of the average longevity of a thatched roof appears to be between thirty-five and forty years (a precise average is 38.9 years).

As a means of determining the lifespan of thatch that would be at least partially independent of this evidence taken from the experience of the various thatchers of the Stanford family, a series of photographs of thatched buildings that covered the twentieth century were examined in great detail. These were mostly found in the National Monuments Record at Swindon and in the Cambridge Collection of the county record office. Many of these photographs were neither fully titled nor dated and were hard or impossible to identify. Nevertheless, among them, there were identifiable and dated photographs of fifteen buildings that both spanned much of the twentieth century and provided two records of each house, all of which had also been surveyed in 1993. All of these roofs had been thatched in long wheat straw.

The question therefore arose that some of the older weathering coats analysed for possible age, among other things in 1993, might also appear in a newer condition in the more recent photograph, and this could then be compared with the weathering coat shown in the less recent photograph. The analysis began, therefore, with three sets of information that related to the possible ages for each of the fifteen roofs. This comprised an estimated age of the roof when examined in 1993, and therefore a date when it was last thatched, and similarly an estimated age of the roof for each of the two photographs. These estimates were based on the experience of the thatchers who had been interviewed during the research, and made no allowance for local circumstances, such as microclimate, orientation of roof, original quality of thatching and so on. Consequently only a general conclusion could be drawn, but the possibility of this being of value made the experiment seem worthwhile.

In general Cambridgeshire thatchers seemed to agree that a good roof should last between thirty and forty years. Hence, using the method of judging longevity set out in Chapter 3, the analysis was firstly based on a somewhat pessimistic likely lifespan for a Cambridgeshire weathering coat of thirty years, with a built-in allowance for error of five years either way; a similar likely age for the more recent photograph, with a built-in error of five years either way, and also a likely life-expectancy projected forward, and a similar built-in error; and, lastly, a similar likely age and life-expectancy for the older photograph, in each case based on the stated date of the photograph itself. The findings were then plotted in the form of a bar chart (in Appendix B), each photograph and the 1993 estimate appearing as a bar set against a scale of years and marked with the year (DP) of the photograph or the year (1993) of the survey (CSS). Each bar has a green centre, based on a minimum lifespan of twenty-five years, and a more extensive yellow surround allowing for an error of five years. The whole process was then repeated, but this time based on the more optimistic evidence of the Stanford family for a likely lifespan of a Cambridgeshire weathering coat of forty years, again with a five-year margin of error. A similar bar chart was then drawn up, with green minimum and yellow maximum bars representing the 1993 survey and the two photographs for each building. When the bar charts were examined in detail interesting conclusions could be drawn for each individual roof.

Roof Ar 05

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1961 showed a weathering coat that might have been laid between 1946 and 1951and could therefore last until 1976 to 1981. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until 1945 to 1950.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1961 showed a weathering coat that might have been laid between 1946 and 1951 and could therefore last until 1986 to 1991. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until

1955 to 1960.

Conclusion.

If the forty-year lifespan is taken as correct, the coat analysed in 1993 is not likely to be the same as the coat photographed in 1961, despite a very extensive overlap. The 1961 coat follows on from the coat photographed in 1930, but with an overlap again, although this could be reconciled.

If the thirty-year lifespan is taken as correct, the evidence apparently accounts for three weathering coats, with a more reconcilable overlap. This is still of at least nine years between the 1961 and 1993 coats, but the 1930 and 1961 coats suggest a thatching date between 1945 and 1950.

All in all, a thirty-year lifespan looks a more likely proposition for this roof, but no firm conclusion is possible.

Roof Ar 06

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1961 showed a weathering coat that might have been laid between 1941 and 1946 and could therefore last until 1971 to 1976. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until 1945 to 1950.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1961 showed a weathering coat that might have been laid between 1941 and 1946 and could therefore last until 1981 to 1986. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until 1955 to 1960.

Conclusion.

If the forty-year lifespan is taken as correct, the coat photographed in 1961 overlaps both the coat photographed in 1930 and that analysed in 1993 by ten years or more. If the thirty-year lifespan is taken as correct, the overlaps are reduced to one year and four years. A thirty-year lifespan therefore seems to be very likely.

Roof Ba 11

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1943 and 1948. The later photograph of 1960 showed a weathering coat that might have been laid between 1925 and 1930 and could therefore last until 1955 to 1960. The earlier photograph of 1926 showed a weathering coat that might have been laid between 1911 and 1916 and could therefore last until 1941 to 1946.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1943 and 1948. The later photograph of 1960 showed a weathering coat that might have been laid between 1925 and 1930 and could therefore last until 1965 to 1970. The earlier photograph of 1926 showed a weathering coat that might have been laid between 1911 and 1916 and could therefore last until 1951 to 1956.

Conclusion.

If the forty-year lifespan is taken as correct, the coat analysed in 1993 might be the same as the coat photographed in 1960. The 1993 coat follows on from the coat photographed in 1926 fairly well, with a likely re-thatching between 1940 and 1948. If the thirty-year lifespan is taken as correct, the evidence might still account for two weathering coats, but the 1960 coat is now more of a problem, but might be explained as a third intervening coat; if so this would reduce the possible lifespans of all three coats even more. A forty-year lifespan therefore seems more likely, but the 1960 coat casts doubt on a firm conclusion.

Roof Ho 08

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1960 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1965 to 1970. The earlier photograph of 1935 showed a weathering coat that might have been laid between 1910 and 1915 and could therefore last until

1940 to 1945.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1960 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1975 to 1980. The earlier photograph of 1935 showed a weathering coat that might have been laid between 1910 and 1915 and could therefore last until 1950 to 1955.

Conclusion.

The evidence seems to show three separate coats. If the forty-year lifespan is taken as correct, the coat analysed in 1993 overlaps the 1960 coat by three years, but this in turn overlaps the 1935 coat by ten years. With a thirty-year lifespan the two photographed coats appear to be precisely consecutive, with little or no overlap; however, there is a gap of possibly eight years between the 1960 and 1993 coats. A thirty-year lifespan therefore seems to be more likely.

Roof La 01

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1967 showed a weathering coat that might have been laid between 1942 and 1947 and could therefore last until 1972 to 1977. The earlier photograph of 1935 showed a weathering coat that might have been laid between 1905 and 1910 and could therefore last until 1935 to 1940.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1967 showed a weathering coat that might have been laid between 1942 and 1947 and could therefore last until 1982 to 1987. The earlier photograph of 1935 showed a weathering coat that might have been laid between 1905 and 1910 and could therefore last until 1945 to 1950.

Conclusion.

The evidence points to the existence of three separate coats. If the forty-year lifespan is taken as correct, the coat analysed in 1993 overlaps the coat photographed in 1967 by five years, but there is a small gap of two years between the 1967 coat and the 1935 coat of two years. If the thirty-year lifespan is taken as correct, there is a gap between the 1993 and 1967 coats of six years, and the gap between the 1967 and 1935 coats has grown to twelve years. A forty-year lifespan seems to be the more likely choice.

Roof Mb 20

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1961 showed a weathering coat that might have been laid between 1936 and 1941 and could therefore last until 1966 to 1971. The earlier photograph of 1950 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1965 to 1970.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1978 and 1983. The later photograph of 1961 showed a weathering coat that might have been laid between 1936 and 1941 and could therefore last until 1976 to 1981. The earlier photograph of 1950 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1975 to 1980.

Conclusion.

Whichever lifespan is considered the two photographed coats appear to be one and the same. If a forty-year lifespan is taken as correct, they may directly precede the 1993 coat, although there is a maximum gap of eight years between them, although two years is more likely. If a thirty-year lifespan is taken, the gap extends to a minimum of two years and a maximum of twelve years. This cold hardly be filled by a third, unobserved coat: it would have been of very short duration, and caused by unusual circumstances. By far the greater likelihood is that only two coats are involved and these had a forty-year lifespan.

Roof Me 06

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1965 showed a weathering coat that might have been laid between 1945 and 1950 and could therefore last until 1975 to 1980. The earlier photograph of 1950 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1965 to 1970.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1965 showed a weathering coat that might have been laid between 1945 and 1950 and could therefore last until 1985 to 1990. The earlier photograph of 1950 showed a weathering coat that might have been laid between 1935 and 1940 and could therefore last until 1975 to 1980.

Conclusion.

This is a very similar case to Ba 11: the 1965 coat is hard to reconcile with the 1950 and 1993 coats, so a general conclusion is impossible.

Roof Me 08

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1968 showed a weathering coat that might have been laid between 1948 and 1953 and could therefore last until 1978 to 1983. The earlier photograph of 1949 showed a weathering coat that might have been laid between 1929 and 1934 and could therefore last until 1959 to 1964.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1968 showed a weathering coat that might have been laid between 1948 and 1953 and could therefore last until 1988 to 1993. The earlier photograph of 1949 showed a weathering coat that might have been laid between 1929 and 1934 and could therefore last until 1969 to 1974.

Conclusion.

This is another case where the middle coat, that of 1968, overlaps the 1993 coat and the older 1948 coat. There seems to be no case for suggesting that there are only two coats involved. The overlaps are reduced with a thirty-year lifespan, and this is marginally the more likely.

Roof Me 12

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1949 showed a weathering coat that might have been laid between 1929 and 1934 and could therefore last until 1959 to 1964. The earlier photograph of 1925 showed a weathering coat that might have been laid between 1905 and 1910 and could therefore last until 1935 to 1940.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1949 showed a weathering coat that might have been laid between 1929 and 1934 and could therefore last until 1969 to 1974. The earlier photograph of 1925 showed a weathering coat that might have been laid between 1905 and 1910 and could therefore last until 1945 to 1950.

Conclusion.

In both cases there seem to be three distinct coats. If the forty-year lifespan is taken as correct, the coat analysed in 1993 follows the coat photographed in 1949, with a maximum gap of eight years. This coat overlaps the 1925 coat by a minimum of twelve years, and this is rather long, but not so long as to suggest that the two are one and the same. If the thirty-year lifespan is taken as correct, this overlap shrinks to two years, but the gap between the 1949 and 1993 coats increases to a maximum of nineteen years. A fourth coat could hardly be squeezed in here. All in all, a forty-year lifespan looks a more likely proposition for this roof.

Roof Or 04

The 1993 weathering coat was laid in 1983. The later photograph of 1949 shows a weathering coat was laid in 1948 and is known to have lasted thirty-five years.

Based on a 30-year lifespan

The earlier photograph of 1936 shows a weathering coat that might have been laid between 1921 and 1926 and could therefore last until 1951 to 1956.

Based on a 40-year lifespan

The earlier photograph of 1936 showed a weathering coat that might have been laid between 1921 and 1926 and could therefore last until 1961 to 1966.

Conclusion.

The lifespan of the 1949 coat was thirty-five years. There is an overlap between the 1936 and 1949 coats, and this is smaller if the 1936 coat had a thirty-year lifespan.

Roof Sh 15

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1978 and 1983. The later photograph of 1983 showed a weathering coat that might have been laid between 1978 and 1983. The earlier photograph of 1978 showed a weathering coat that might have been laid between 1953 and 1958 and could therefore last until 1983 to 1988.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1978 and 1983. The later photograph of 1983 showed a weathering coat that might have been laid between 1978 and 1983. The earlier photograph of 1978 showed a weathering coat that might have been laid between 1953 and 1958 and could therefore last until 1993 to 1998.

Conclusion.

Clearly the coat photographed in 1983 is the same as the 1993 coat. If a forty-year lifespan is taken as correct, the coat photographed in 1978 must have suffered an untimely end, since it does not seem likely to have been the same as the later coat. If a thirty-year lifespan is taken as correct, the earlier photographed coat could be neatly be superseded by the later one. A thirty-year lifespan looks the more likely proposition for this roof.

Roof Wc 05

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1951 showed a weathering coat that might have been laid between 1936 and 1941 and could therefore last until 1966 to 1971. The earlier photograph of 1910 showed a weathering coat that might have been laid between 1895 and 1900 and could therefore last until 1925 to 1930.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1951 showed a weathering coat that might have been laid between 1936 and 1941 and could therefore last until 1976 to 1981. The earlier photograph of 1910 showed a weathering coat that might have been laid between 1895 and 1900 and could therefore last until 1935 to 1940.

Conclusion.

There seems to be a clear case here for three consecutive roofs.

If the forty-year lifespan is taken as correct, the maximum gap between the coats is six years for the earlier coats, and a maximum overlap of eight years for the later coats. If a thirty-year lifespan is taken, the maximum gap increases to sixteen years between the earlier coats, and there is now a minimum gap of a single year between the later coats. A forty-year lifespan seems to be more likely.

Roof Ww 13

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1951 showed a weathering coat that might have been laid between 1946 and 1951 and could therefore last until 1976 to 1981. The earlier photograph of 1927 showed a weathering coat that might have been laid between 1907 and 1912 and could therefore last until 1937 to 1942.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1963 and 1968. The later photograph of 1951 showed a weathering coat that might have been laid between 1946 and 1951 and could therefore last until 1986 to 1991. The earlier photograph of 1927 showed a weathering coat that might have been laid between 1907 and 1912 and could therefore last until 1947 to 1952.

Conclusion.

Three separate coats seem to be involved. There is a good connection between the 1951 and 1927 coats if a forty-year lifespan is involved, but there is a gap of three to thirteen years if the lifespan is thirty years. There is an overlap between the 1951 and 1993 roofs of a minimum of eighteen years with a forty-year lifespan, eight years with thirty years. No conclusion is really possible, but a forty-year lifespan is slightly more likely.

Roof Ww 17

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1960 showed a weathering coat that might have been laid between 1940 and 1945 and could therefore last until 1970 to 1975. The earlier photograph of 1933 showed a weathering coat that might have been laid between 1923 and 1928 and could therefore last until 1954 to 1959.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1973 and 1978. The later photograph of 1960 showed a weathering coat that might have been laid between 1940 and 1945 and could therefore last until 1980 to 1985. The earlier photograph of 1933 showed a weathering coat that might have been laid between 1923 and 1928 and could therefore last until 1964 to 1969.

Conclusion.

Once again, this is a similar example to the preceding ones. There appear to be three coats with overlaps, and possibly a gap between the later coats. If a forty-year lifespan is taken as correct, the minimum overlaps amount to seventeen and two years, for the earlier and later re-thatching respectively. If a thirty-year lifespan is taken as correct, the earlier overlap is reduced to a minimum of eight years, and the later overlap becomes a maximum of two years or a maximum gap of three years. So, a thirty-year lifespan marginally looks a more likely proposition for this roof.

Roof Wi 05

Based on a 30-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1970 showed a weathering coat that might have been laid between 1960 and 1965 and could therefore last until 1993. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until 1945 to 1950.

Based on a 40-year lifespan

The 1993 survey suggested that the weathering coat had been laid between 1968 and 1973. The later photograph of 1970 showed a weathering coat that might have been laid between 1960 and 1965 and could therefore last until 1993. The earlier photograph of 1930 showed a weathering coat that might have been laid between 1915 and 1920 and could therefore last until 1955 to 1960.

Conclusion.

Is this evidence of two coats or three? If a forty-year lifespan is taken as correct, the coat analysed in 1993 must be the same as the coat photographed in 1967. This coat follows on from the coat photographed in 1929, with a maximum gap of ten years and a minimum of none with a re-thatching in 1960. If a thirty-year lifespan is taken as correct, the maximum gap is of twenty years and the minimum of ten years. An unrecorded coat of thatch could be squeezed in here, but would have been of very short duration. All in all, a forty-year lifespan looks a more likely proposition.

Conclusion

Of the fifteen cases examined in this survey of the photographic evidence, one (Me 06) is inconclusive, and five are doubtful. Of these, three (Me 08, Sh 15, and Ww 17) favour a thirty-year lifespan by a small margin, and two (Ba 11 and Ww 13) a forty-year lifespan. The nine remaining cases produce a more clear result: four (Ar 05, Ar 06, Ho 08 and Sh 15) favour a thirty-year lifespan, and four (Lo 01, Mb 20, Me 12 and Wc 05) favour a forty-year lifespan, and just one (Or 04) indicates the mean of thirty-five years.

Given the numerous factors that influence longevity perhaps no further conclusion is warranted. A simple mathematical average suggests that a likely lifespan of thirty-five years or slightly less may be expected from a thatched roof in Cambridgeshire. That this is slightly less than the evidence drawn from the Stanford family may have little significance. When interviewed, a thatcher may slightly exaggerate the longevity of his work, or his work may indeed be of slightly better quality than the average, or the roofs he has worked on slightly better placed to last.

No pattern emerges from the individual disposition of the fifteen roofs. The roofs with either a clear thirty-year or forty-year lifespan come from the north, south-east and south-west of the county in a seemingly random way. In six cases two roofs from three individual parishes were recorded. The two in West Wickham (Ww 13 & 17) and the two in Meldreth (Me 8 & 12) bridge the gap of thirty and forty years, thus reinforcing the apparently random distribution of longevity. In Arrington the thatch of both houses (Ar 05 and Ar 06) appears to have a thirty-year lifespan, but there seems to be no adverse topographical reason here for this, such as climatic disadvantage or unusual humidity caused by low elevation.

The specific differences in the location of the individual examples are unknown, although the evidence suggests that these are probably more important. Even more likely is the quality of thatching. This depends on the quality of the materials itself, how thoroughly the materials are prepared on the ground, how tightly the bundles are laid and firmly fixed, and how well obstacles such as dormers and chimney-stacks are dealt with. This has never been recorded, and an experiment to do so would be complex, have to run for at least a decade, if not far more, so as to reach a sensible conclusion, and of course be very expensive to undertake.

Far more to the point, thatching in Cambridgeshire in long wheat straw appears to produce the greatest longevity that can be found in Britain. Even if this averages at around thirty-five years as opposed to forty, it is significantly longer than in Devon, where a wetter climate, a lower pitch of roof, and tendency to employ the combed wheat reed method (which has always been seen as superior to long wheat straw) produces a lifespan of only twenty to thirty years (Cox and Thorp 2001, 161).

These results, taken together with the evidence from the Stanford family (Appendix B), suggest that on average a long wheat straw roof is likely to have lifespan of about thirty-five to forty years, rather than thirty years as seems to be generally recognized. The main reasons for this can be ascribed to three main factors: the dry climate; the steep pitch of Cambridgeshire roofs; and the excellent quality of Cambridgeshire thatching.

Thatchers tend to agree with this. A second questionnaire sent to the original twenty-six Cambridgeshire thatchers failed to produce a significant response. Many of the questions related to longevity of thatch and the causes of deterioration. While this failure was an expected outcome, largely resulting from their notable secretiveness, the three thatchers who did respond were keen to suggest that the skill with which a roof is thatched is a major contributing factor to its longevity. They suggested a longevity of thirty years (Temple), a minimum of thirty-seven years (Potter) and forty years (DDSR). Other thatchers in conversation have also suggested about forty years, although, of course, it is in their interest to do so.

If this is so, and, if Cambridgeshire roofs last as long if not longer than elsewhere, it is still necessary to account for why this should be so. While the climate may well favour longevity, it is possible that a tradition of quality may also be responsible. This is surprising in a once poor county. To invest so much quality in a roof is, however, not necessarily a sign of wealth. It may instead result from an economic decision based on the notion that, if a thatcher's labour is cheap, it makes better sense for him to spend longer preparing and laying the thatch to the highest standard, for only a marginal extra cost, if it provides ten years or a third extra life. This, of course, does not favour the thatcher, since it immediately removes a third of the county's roofs from the pool of work, which, had they been in, say, Devon, would be providing employment. This possibility nevertheless enters the realm of speculation since there is no evidence to determine the issue.

Other causes of variations in lifespan, in terms of individual slopes, their pitch and orientation, the quality and source of the straw, etc, must come into play, but, once again no controlled experiments have been undertaken that might indicate their relative effect, and such experiments would need to be undertaken over a period of even as long as two or three decades so as to be of any significance.

Chapter 7 - CONCLUSION

At the start of the research for this thesis, Cambridgeshire was known to be a county with numerous thatched houses, all of which were believed to be of low status and of fairly recent construction.

The thesis has shown that this is largely proved. However, a significant number of houses are much older than first thought, and are clearly late medieval in origin. There are nearly eight hundred thatched buildings in the county, and by far the bulk of these are small houses, usually of one floor with an upper storey partly built into the roof space. They are all to be found in the countryside, thatching having been long since abandoned in the only town, Cambridge. The lobby-entry plan of these rural houses and their constructional details suggest, correctly as it turned out, that they had been built over a long period stretching from the sixteenth to the nineteenth century, and had always been thatched. The greater proportion of these houses are thatched in long wheat straw, as opposed to the better quality water reed, which is also far more expensive. A third method of thatching, in combed wheat reed, is very much in the minority and apparently of recent introduction. It is in any case a hybrid of long wheat straw, a cheap material used in such a way as to imitate water reed. Its supposed advantage of longevity has proved to be largely illusory when compared with long wheat straw.

There are nevertheless several exceptions to this general rule. On the north-west side of the county the number of roofs thatched in water reed was far higher than elsewhere, probably because easy transport reduced its cost, and perhaps also because those people living in thatched houses in this more pastoral part of the county (as opposed to the more arable and manorialised east) were more affluent and therefore could afford to pay more for a roof that would last appreciably longer.

A roof thatched in long wheat straw (and indeed also combed wheat reed) may be expected to last between thirty and forty years, whereas a water reed roof may last up to seventy years, if not a hundred. Even so, for double the life expectancy, one could well pay up to fifty percent more. This was beyond both the budget and life expectancy of many owners. So, even in today's affluent circumstances, long wheat straw is still overall the dominant material, and not necessarily a false economy.

Another exception results from the discovery of several houses of medieval origin, where the original base coat survived. In many cases this was recognisable by its being blackened by the smoke from a former open hearth in their halls. While the survey found a total of nineteen examples of smoke-blackened thatch, where formerly the belief was that there would be none, this figure may well represent only a quarter of the possible total number of survivals for the county as a whole. Indeed, there may well be even more, thus suggesting that Cambridgeshire is far richer in small mediaeval houses than had been expected. Two such houses, at Litlington and Waterbeach, had originated as aisled halls, possibly an indication of both greater age and an origin in a higher social status. The implications of this, and also for archaeo-botany, have not been pursued.

While there has been no historical change in water reed as a thatching material, the varieties of wheat used for thatching have changed historically to a very great degree. While it is hard to be sure how far this has changed thatching methods, it is clear that techniques must have been slowly adjusted imperceptibly over a long period of time. Even so, it is also clear that thatchers require a longer form of straw than most modern varieties of wheat produce. They have no other choice, and therefore wheat with a long stem is especially grown for thatching, not for grain.

Thatching, so the Questionnaire showed, is a very conservative craft, being handed down from father to son, or from one thatcher to his apprentice, in an age-old traditional way. Thatchers do not like to discuss their techniques, probably as a consequence. These are guarded secrets, and difficult to penetrate, even from inside the craft. Experience is all important, and not to be shared willingly. Although modern transport has changed their working practices, it is surprising how little this has really affected their actual techniques. While few thatchers are willing to travel much more than twenty miles for work today, this represents hardly double their range in the days when journeys were always accomplished on foot.

Thatching, for all the skill needed, was seemingly never one of the more highly regarded building crafts historically. In the Middle Ages thatching was the most usual way of covering any roof but one of the highest status. This changed, so that by the eighteenth century, it was generally confined to the roofing of a poor person's house. Today, the thatched house represents a highly desirable form of rusticity for the newly affluent town worker who lives in the countryside. Even so, thatching remains a poorly remunerated occupation that involves hard physical labour in difficult working conditions. The craft, which was in great decline until well after the Second World War, has now stabilised, but it still does not attract many newcomers. Low pay, long hours, a lengthy period of apprenticeship, hard work and, possibly precarious employment prospects, do not attract today's youth looking for work in the building industry.

Although many of Cambridgeshire's thatched roofs were in a poor condition as a result of their age at the time of the survey (1993), there are only two such roofs covered over in corrugated iron, a means of making an emergency repair to a poor thatched roof far more often found in other counties, particularly in the north of England. In fact, the bulk of the county's roofs are in a fair or good condition. They are generally well maintained and renewed when worn out. This is no doubt a consequence of the social changes that have introduced so many affluent town people to the countryside, together with their desire for home improvement and maintenance. This attitude is of course reinforced by historic buildings legislation, although there is no record of the law being used against an owner for failing to maintain a thatched roof. Neither is there a record of consistent conservation policy either at county level or in the local planning authorities.

One further social change, to conclude, has had little effect on thatching, either in Cambridgeshire or in other counties. The Rural Development Commission set up training courses in thatching as a means of halting the decline in the craft. These are all very well, but their short duration and their lack of enough practical application restrict their usefulness. This is particularly the case in Cambridgeshire, a county where there seem to be enough experienced thatchers. These men still jealously guard their skills, which they have gained through hard experience. Other building skills may be learned through education (though this is a debatable point), but thatching can only be successfully learned on the job. The account of thatching methods set out here in Chapter 5 explains how a roof is thatched and the reasons for doing it in the way practiced in Cambridgeshire, but it could never be used alone as a practical handbook for the DIY enthusiast.

GLOSSARY OF THATCHING TERMS

Backfill: A thin layer of straw waste laid on top of the timber battens to allow the thatch material to be slid up and down the roof structure without catching on the timber work of a long wheat straw thatched roof.

Barge, Brow, Flue or Gable: The finished edge of thatch overhanging the gable as opposed to the eaves.

Base Coat or Base Layer: First or original coat of thatch material.

Battens: Thin strips of sawn softwood 25x50mm fixed horizontally to the rafters. The thatch is then stitched to this element.

Bed: A prepared heap of long wheat straw, sedge or rye from which a realm is drawn.

Biddle: Small two or three runged ladder with curved prongs for inserting into thatch and kneeling on.

Bond or scud: Straw tightly twisted so as to form string and used instead of twine to fix straw bottles to the eaves of a roof.

Bottle, Eaves bundles or Eaves wadds: A yealm of straw tied at the small end and used for setting eaves and gables.

Brow course: The first course of reed - after the eave setting, which sets the pitch of the roof.

Bunch: Bundle of water reed approximately 600mm or 1000mm in circumference.

Bundle: A specific quantity of thatch. A bundle is approximately 750mm in circumference when measured around the binding, which is 300mm from the butt end.

Bundle cord: A thick hazel rod with a cord attached, used to hold the yealms together while being carried up on to the roof.

Butt: The lower end of a bundle of straw or reed.

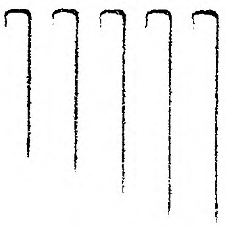
Butting: Dressing the butt ends by dropping the bundle onto a hard clean surface.

Coat: Complete covering of thatch material.

Combed wheat straw: Wheat straw that has been put through a comber.

Course: A horizontal layer of reed or straw thatch.

Crooks, Hooks, Nails or spikes: Made from 6-10mm iron rod varying from



200-300mm in length, pointed at one end, with a turned head at the other. Used in securing thatch to the roof by driving the hook or crook into the timber rafters in conjunction with a sway.

Cross spars or pattern spars: Strips of split hazel or willow used for decorating and securing the ridge on water reed and combed wheat reed thatch and the ridge, eaves and gables on long wheat straw thatch.

Culm: The clean stem of wheat straw or water reed from which the soft leafy material has been removed by combing.

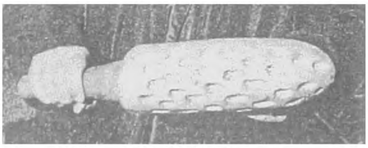
Depth Gauge: A thin stick marked off in increments, used to check that the thatch is being laid to the desired thickness.

Devon reed: Alternative name or combed wheat reed thatch.

Dolly: A tightly made roll of thatch

Dressing: Tapping the butt ends of the thatch upwards with a Leggett to produce the correct surface slope.

Dutchman: A rounded wooden tool used for forming valleys in thatch in a similar way to a leggett.



Eaves hook or Eaves knife: Hook for cutting the eaves.

Ear: The seed head end, or tip of the hatch stem.

Eave: The bottom edge of the roof which overhangs and protects the top of the wall construction.

Fathom: Six bundles of Norfolk reed laid together, with a circumstance of 1800mm measured 300mm from the butts.

Flashing: Sheet lead fixed over the thatch and into the brickwork at junction with a chimney.

Fleeking: A woven mat of water reed used as an alternative to battens. Imparts an attractive finished appearance to the underside of thatch in buildings with open rafters, such as barns and pavilions.

Gable: The finished edge of thatch overhanging the gable.

Gadd or Osier: Length of hazel or willow before splitting.

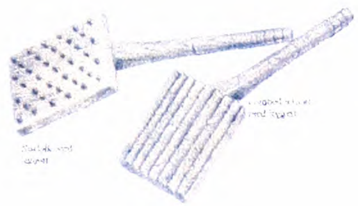
Haams: Oxfordshire dialect for haulm

Haulm: long stubble, probably synonymous with 'reed' in some texts, sometimes meaning straw bound up for thatching; in Oxfordshire dialect 'haams'.

Hip: The outstanding edge formed by the meeting of two surfaces which do not finish with a gable.Hovers Knife: Long bladed and long handled knife used for cutting gables, barges and eaves in long wheat straw.

Hovers Knife: Long bladed and long handled knife used for cutting gables, barges and eaves in long wheat straw

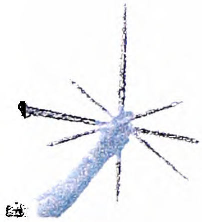
Leggett, Bat, Beetle or Dresser: A wooden tool, shaped like a bat with a grooved surface, used to dress or drive water reed and combed wheat reed into place.



Liggers, Runners or Rods: Split hazel or willow 1000-1500mm in length, used externally on the weathering coat to secure the eaves, gables and ridge of the thatch in the case of long wheat straw. In the case of water reed and the combed wheat reed the ridge is the only element secured in this way.

Long wheat straw: Threshed wheat straw, made up into a bed, wetted and pulled out, yealm ready for securing to a roof structure.

Needle: Metal or wooden tool resembling a large flat sided sewing needle which is threaded with twine at the pointed end for securing the thatch to the timber battens.



Nib: Portion of thatch beside a window or chimney.

Nitch: A bundle of combed wheat reed weighing approximately 13kg (23 lbs).

Peg: 600mm long thin pointed stick used to temporarily hold the edge of a course whilst laying the thatch. Two are used for each course. They are discarded as the course is completed.

Pinnacle or Peak: A raised end of the ridge, surmounting the gable or top point of hip.

Rafter: Sloping timber extending from the eave to the ridge, the primary support of the narrow span of the roof structure.

Ridge or Roving: The apex of a double pitched roof.

Ridge or Capping: Capping on apex of roof.

Types: -

a/ Plain: ridge finished off flush with surface.

b/ Decorated:cross sparing or herring bone pattern.

c/ Straight cut: block ridge 80-100mm thick cut in straight line below bottom ligger.

d/ Ornamental: bottom edge of ridge cut to a pattern

Ridge roll or Dolly: Bundle of reed or straw 100-200mm in diameter of a suitable length used to build up the ridge prior to capping.

Rods: Hazel or willow rods fixed for ornamentation between liggers

Rye straw: Threshed and used for ridging.

Saddle: The material (sedge, rye or wheat straw) laid over the ridge and secured with liggers and spars.

S-Bracket: Curved metal 's'-shaped hook used to support each end of a long pole which the thatcher stand on to get access to the work. (Used only if the work is being done in horizontal rather than vertical lanes).

Scud: See Bond

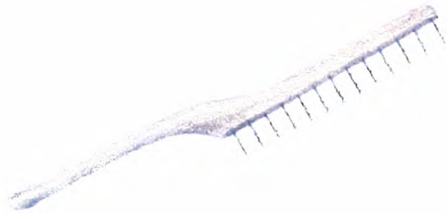
Sedge: Used for ridge capping on water reed and combed wheat reed thatch.

Setts: courses of long wheat reed.

Shearing Hook: Hook for shearing surface of thatch to its final finish.

Side Pin: Large, flat sided metal or wooden pin used to temporary hold course ends upright.

Side rake: A hand held tool, like a comb used to tidy the surface of long wheat straw thatch.



Skirt or aprons: The layer of thatch under chimneys or widows usually block cut into a decorative pattern.

Spars: Sometimes refereed to as Spitts, Broaches or Staples. Split hazel or willow rods 750mm in length pointed at each end and twisted in the middle to form stable. Used for securing a new coat of thatch to the existing coat, also used to secure the liggers.

Spar-coated: A weathering coat of thatch material that is secured to the roof structure by spars only.

Spar hook: A small billhook used for cutting, splitting and sharpening hazel and willow spars.

Spot board: Board for butting water reed.

Steep: soak in water, a process used to soften straw prior to thatching in order to make it pliable and easy to work

Straw bond: Length of straw twisted horizontally across the course and sparred down to fasten the thatch temporally.

Straw rope: A continuous length of rope made from twisted straw, used for tying straw bottles.

Stulch or Lane: A strip of thatch approximately 750mm wide running from eaves to ridge, laid as the work proceeds, as opposed to a horizontal strip.

Sways, ledgers or binders: Split round rods 1-3 m in length used to secure thatch to the roof by being located horizontally across each course of the thatch. They are fixed by stitching with tarred cord or by crooks driven into each rafter at intervals. They are then covered by each succeeding course.

Sweep: The forming of a valley

Tarred twine or cord: Strong cord, treated with Stockholm tar, and used for stitching thatch to rafters or battens.

Tilting fillet or Arris: Timber used in eaves and gable treatment to provide tension in the initial layer of the material.

Valley: An intersection of two sloping surfaces of a roof.

Wadd: Small bunch of combed wheat reed tied at the top for setting the eaves and gables.

Wale: the Norfolk term given to the growing season of water reed, a single wale being one annual season, a double wale being two seasons, hence single wale implies harvesting the reed annually, double wale implies harvesting biennially.

Water reed: Grows on the British and continental marshes and riverside marshland; sometimes contains a small amount of mace reed.

Weathering coat: The topmost layer of thatch which is exposed to the elements of the weather.

Yealm: A prepared drawn layer of long wheat straw or sedge 350-450mm wide and 100-150mm thick.

Yealm holder or yoke: Hazel fork in which yealms are carried up onto a roof.

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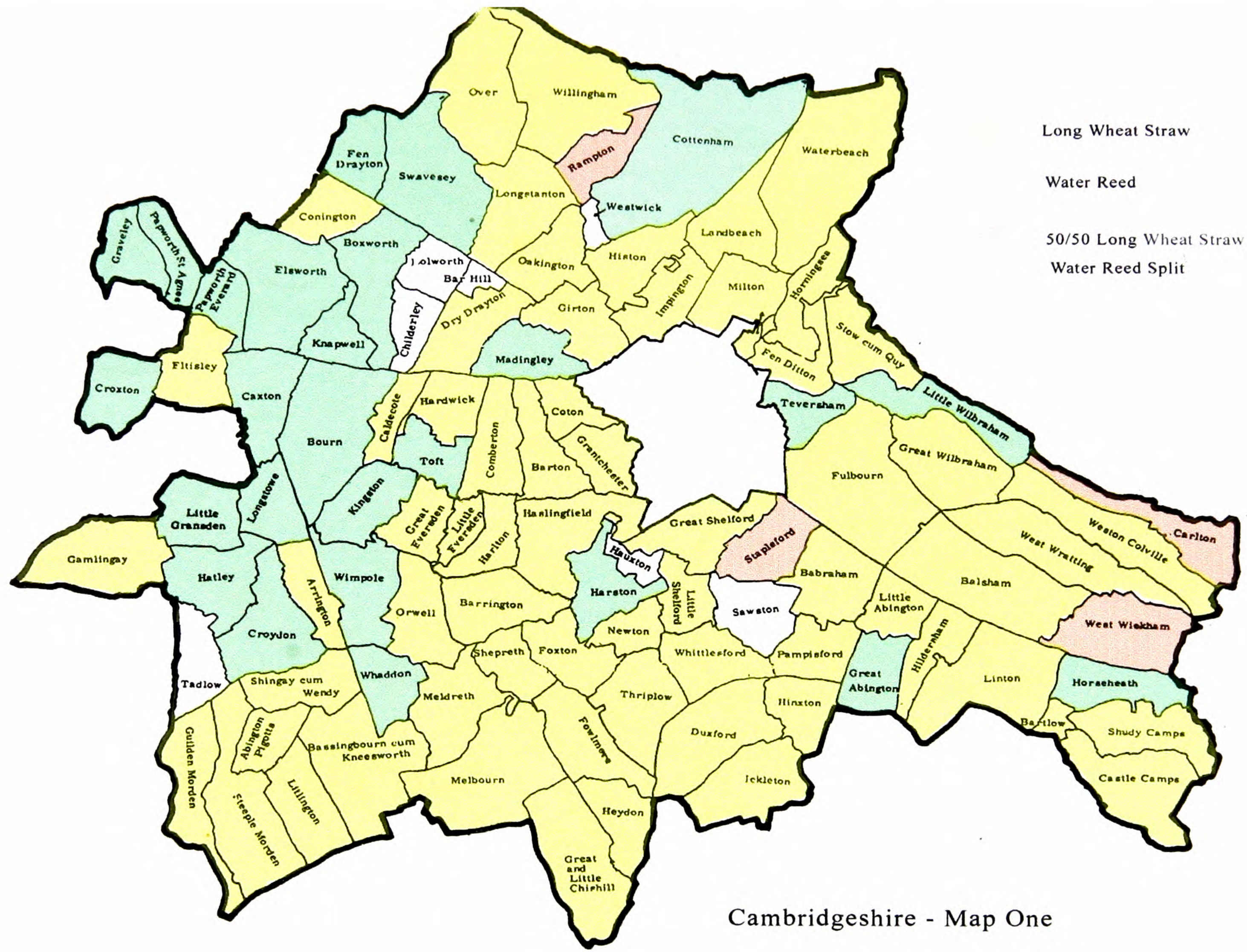
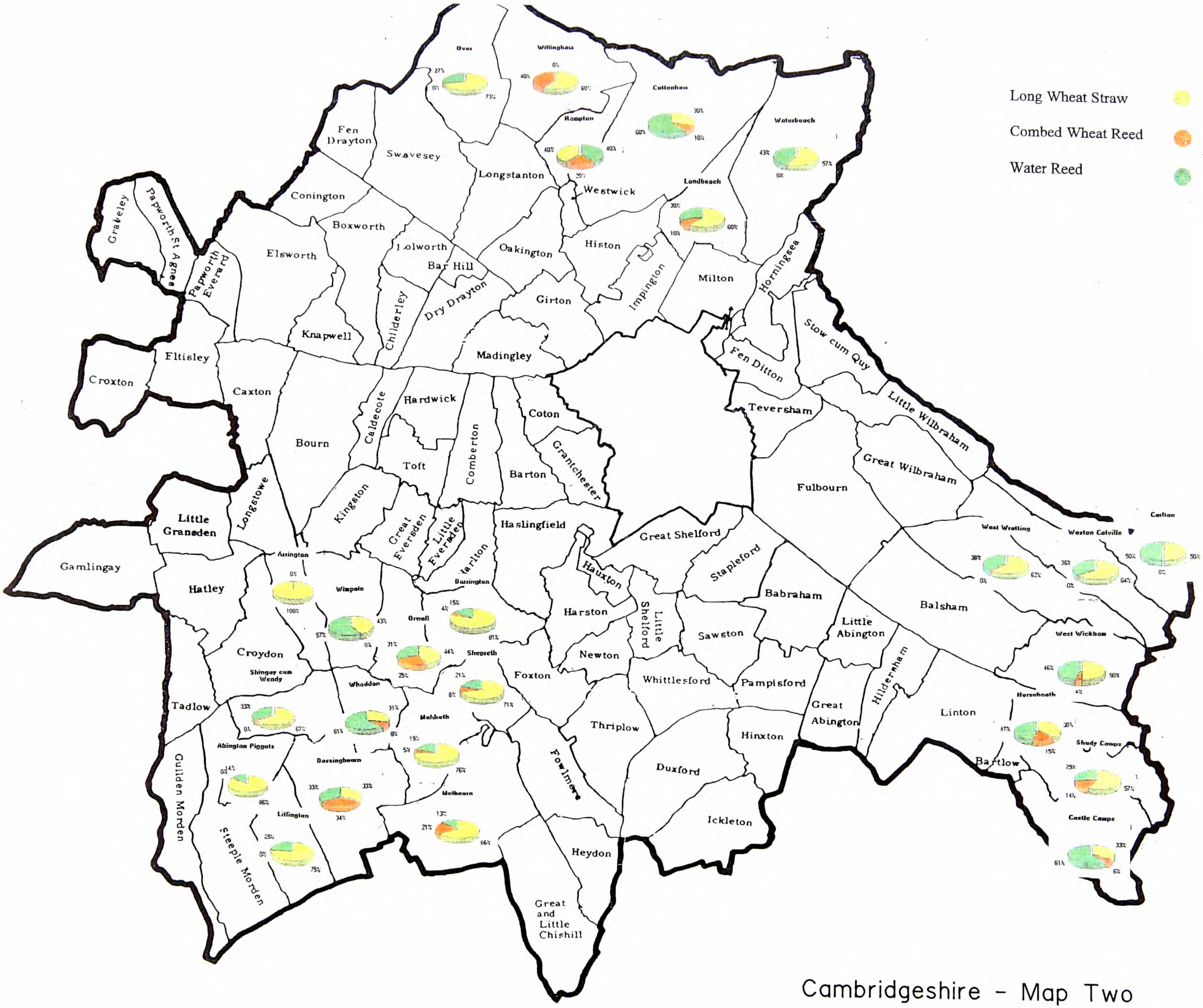
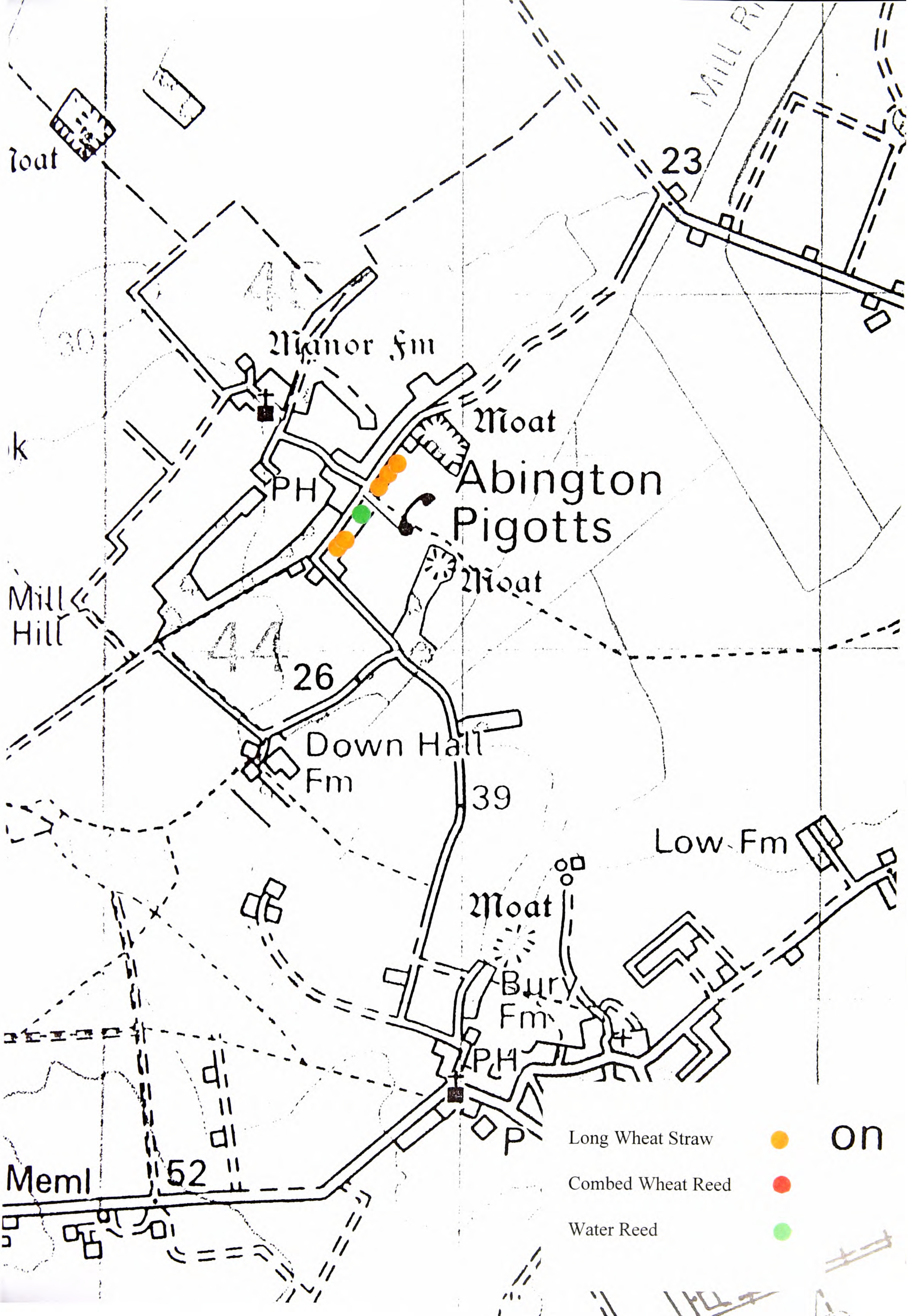
Appendix A



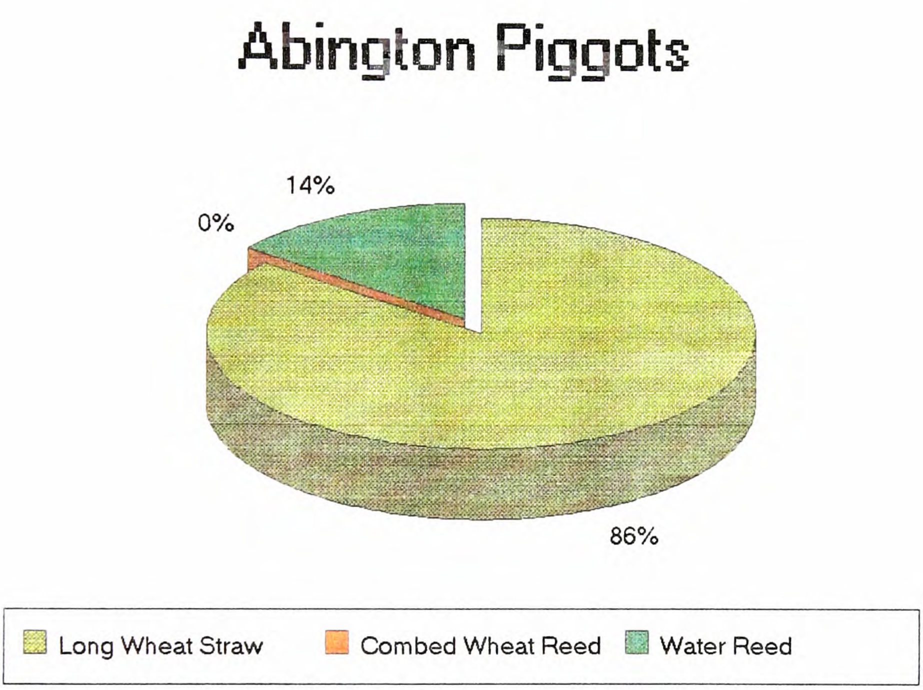
Cambridgeshire - Map One



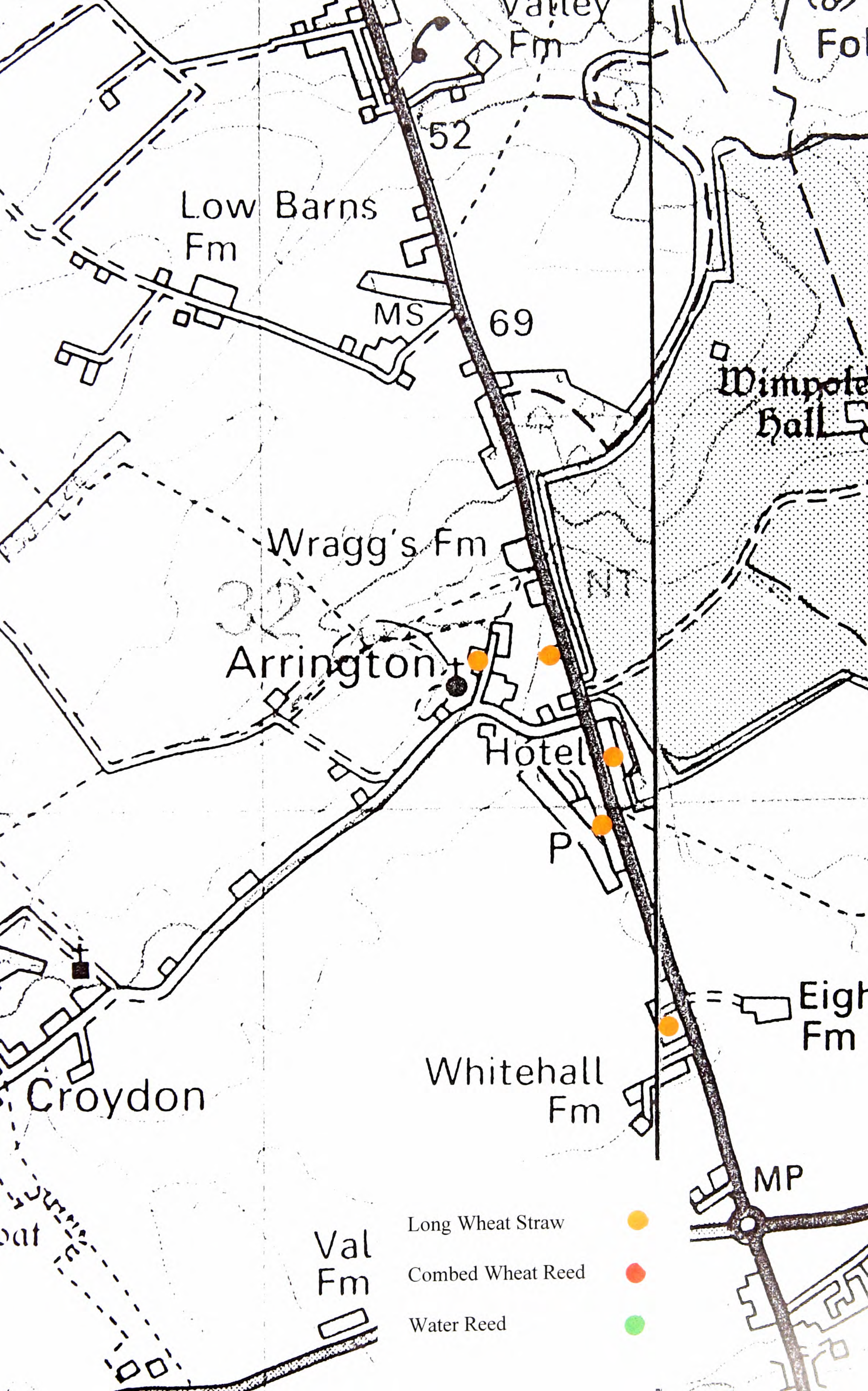
Cambridgeshire - Map Two

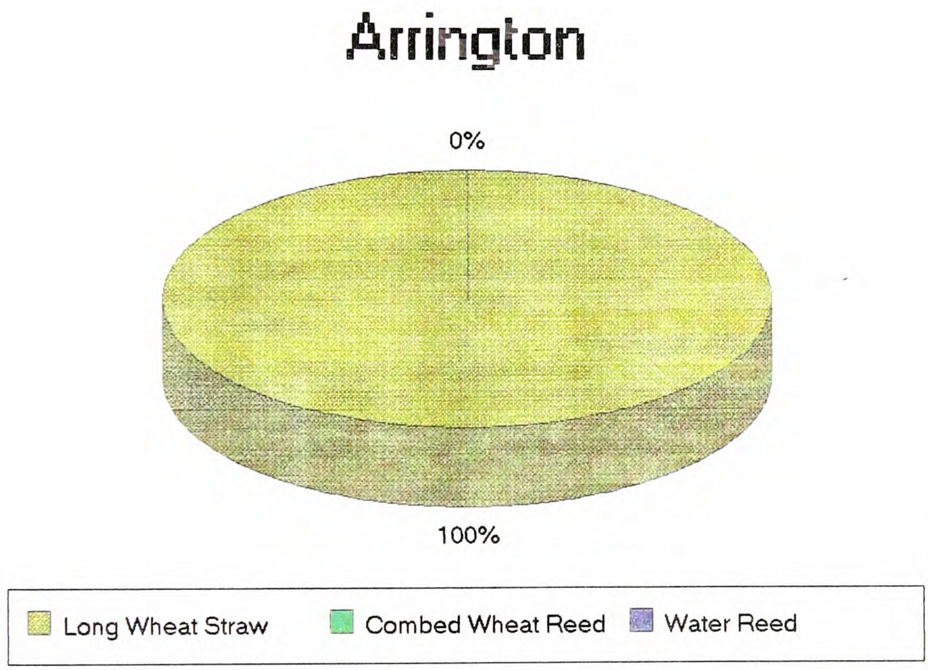


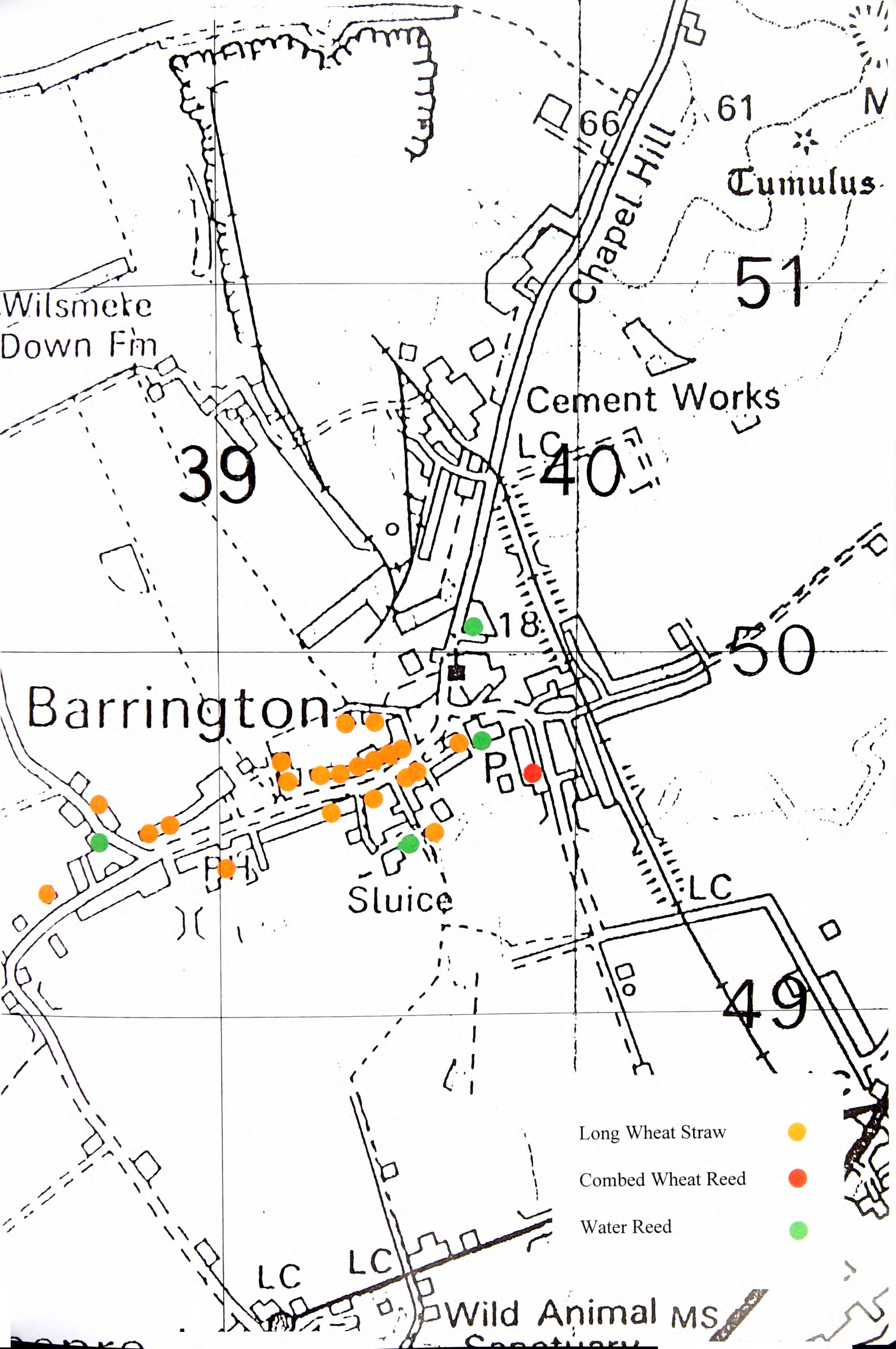
Manor Fm
Moat
Abington
Pigotts
PH
Moat
Mill
Hill
23
44
26
Down Hall
Fm
39
Low Fm
Moat
Bury
Fm
PH
Meml
52
Long Wheat Straw
Combed Wheat Reed
Water Reed



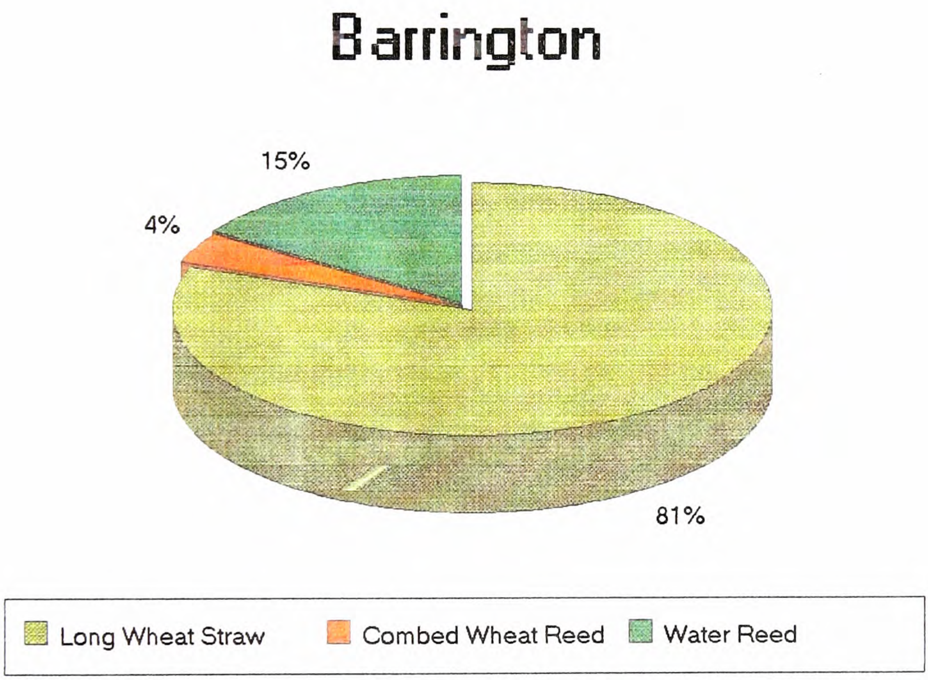
Abington Piggots
14%
0%
86%
Long Wheat Straw
Combed Wheat Reed
Water Reed

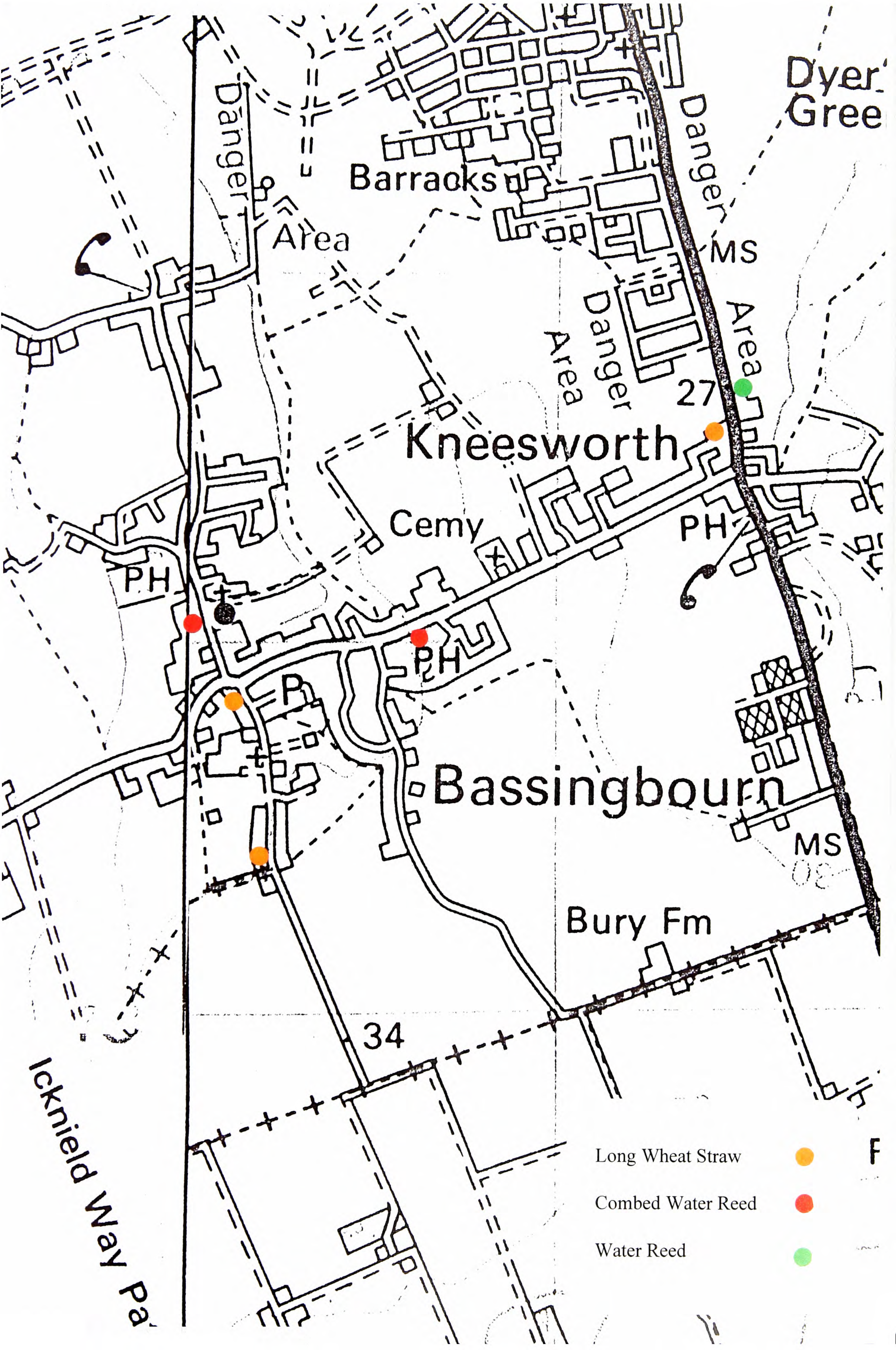

Fm
52
Low Barns
Fm
MS
69
Wimpole
Hall
Wragg's Fm
NT
32
Arrington
Hotel
P
Fm
Whitehall
Fm
Croydon
MP
Val
Fm
Long Wheat Straw
Combed Wheat Reed
Water Reed


Arrington
0%
100%
Long Wheat Straw
Combed Wheat Reed
Water Reed

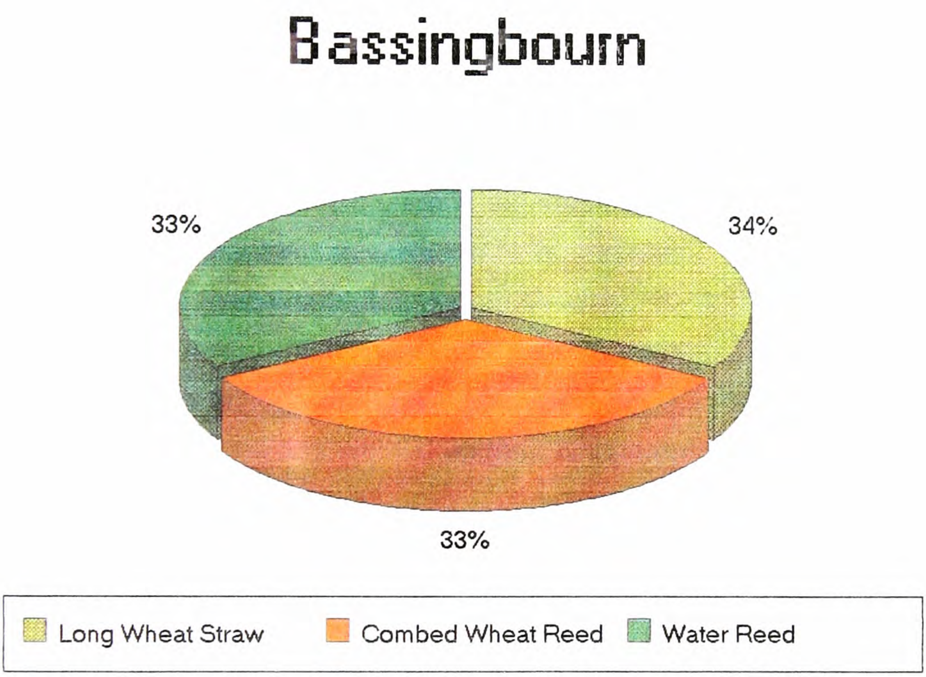


66
61
Chapel Hill
Cumulus
51
Wilsmere
Down Fm
Cement Works
LC
39
40
18
50
Barrington
P
PH
Sluice
LC
49
LC
LC
Wild Animal
MS
Long Wheat Straw
Combed Wheat Reed
Water Reed


Barrington
15%
4%
81%
Long Wheat Straw
Combed Wheat Reed
Water Reed



Dyer' Gree
Danger
Barracks
Area
Danger
MS
Danger Area
Area
27
Kneesworth
Cemy
PH
PH
PH
P
Bassingbourn
MS
30
Bury Fm
34
Icknield Way Pa
Long Wheat Straw
Combed Water Reed
Water Reed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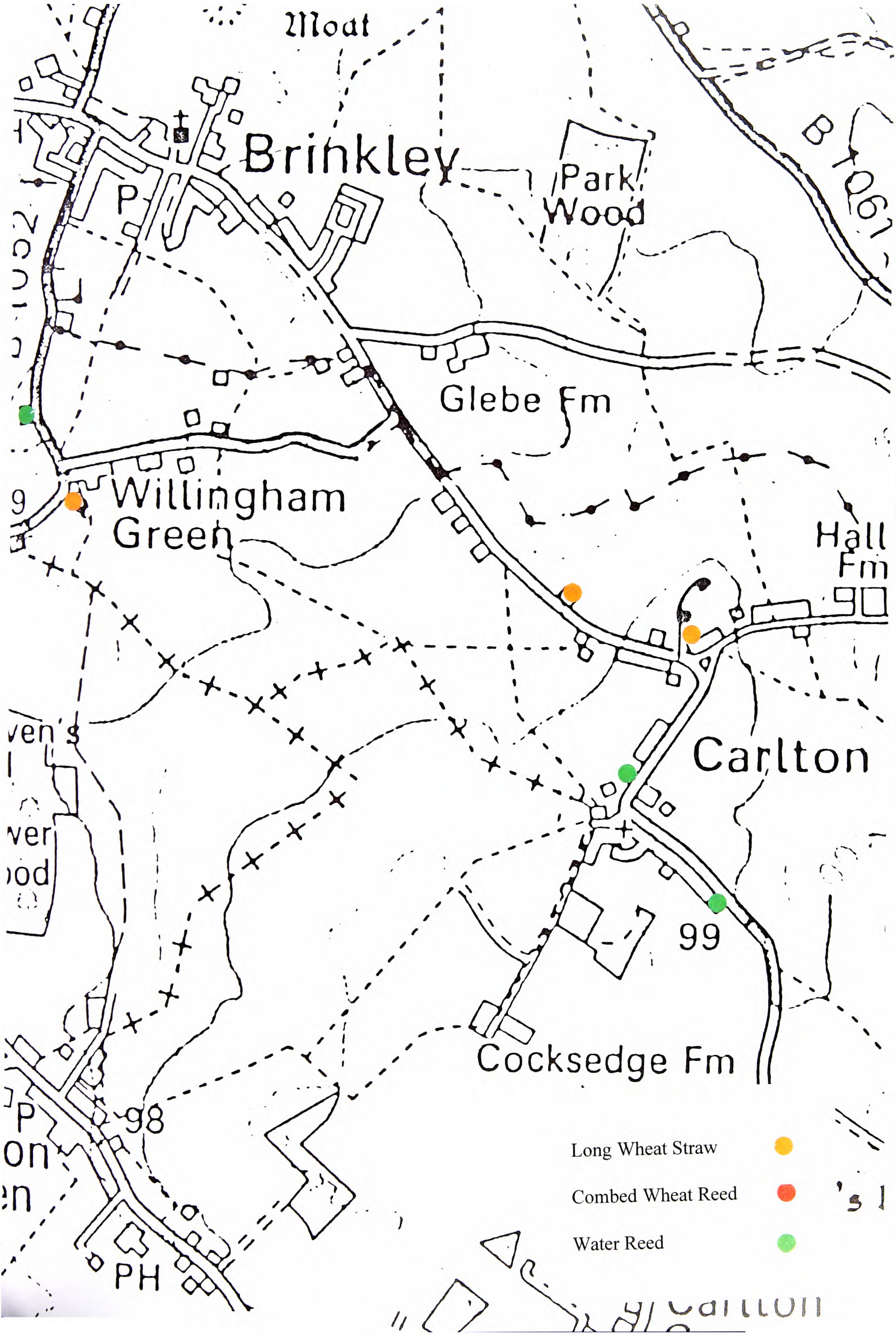
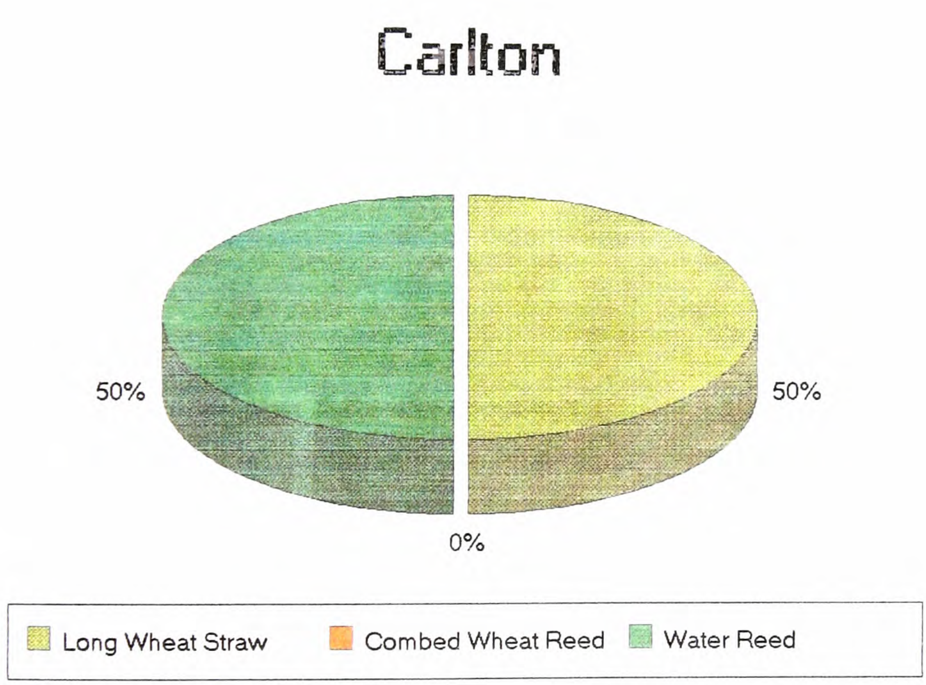
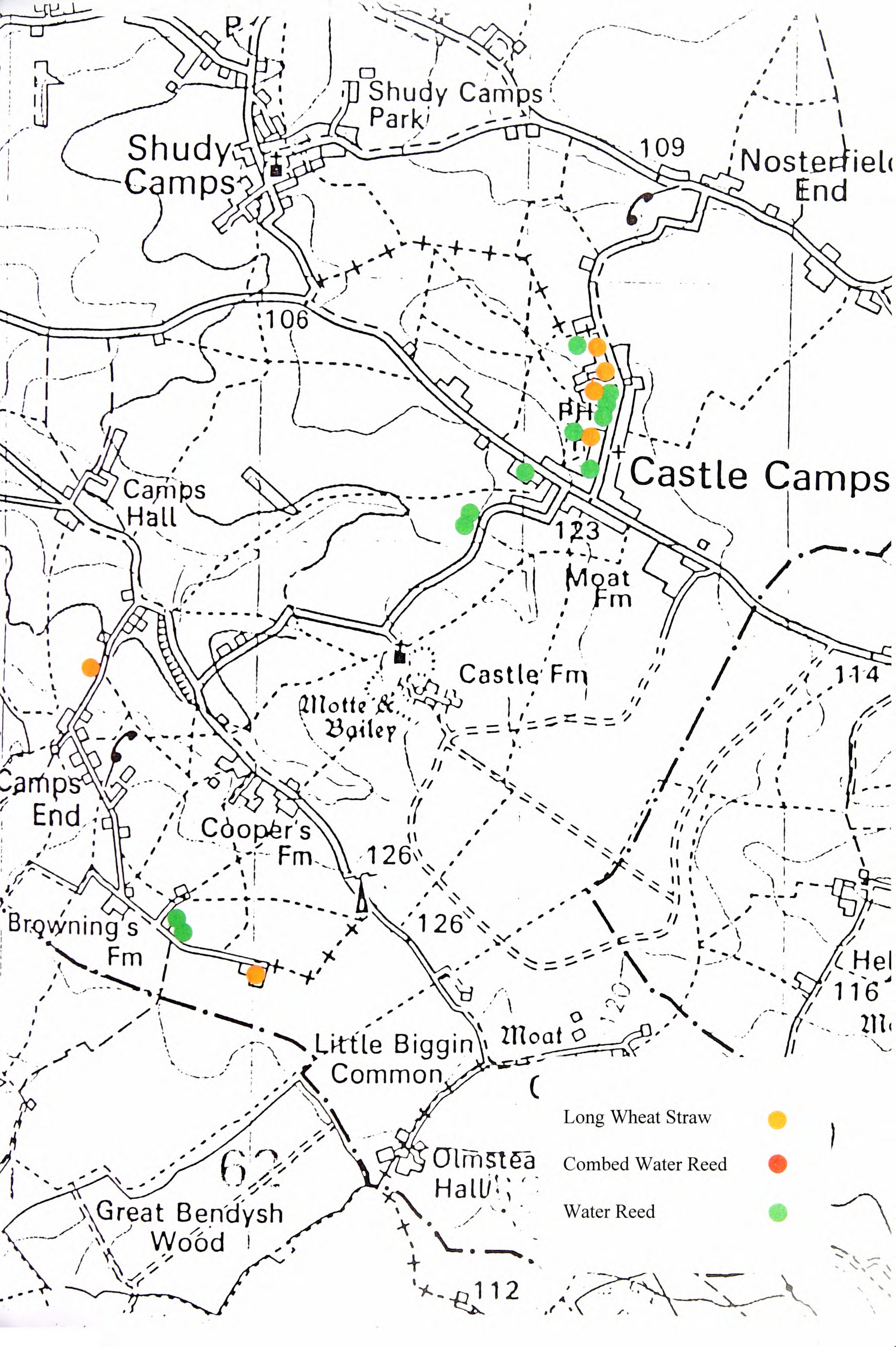
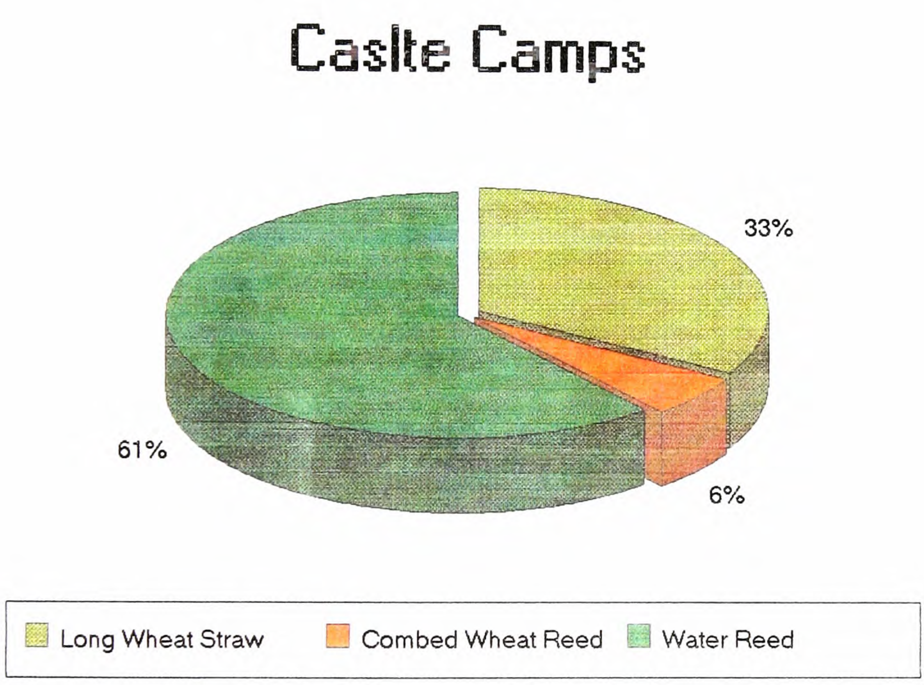
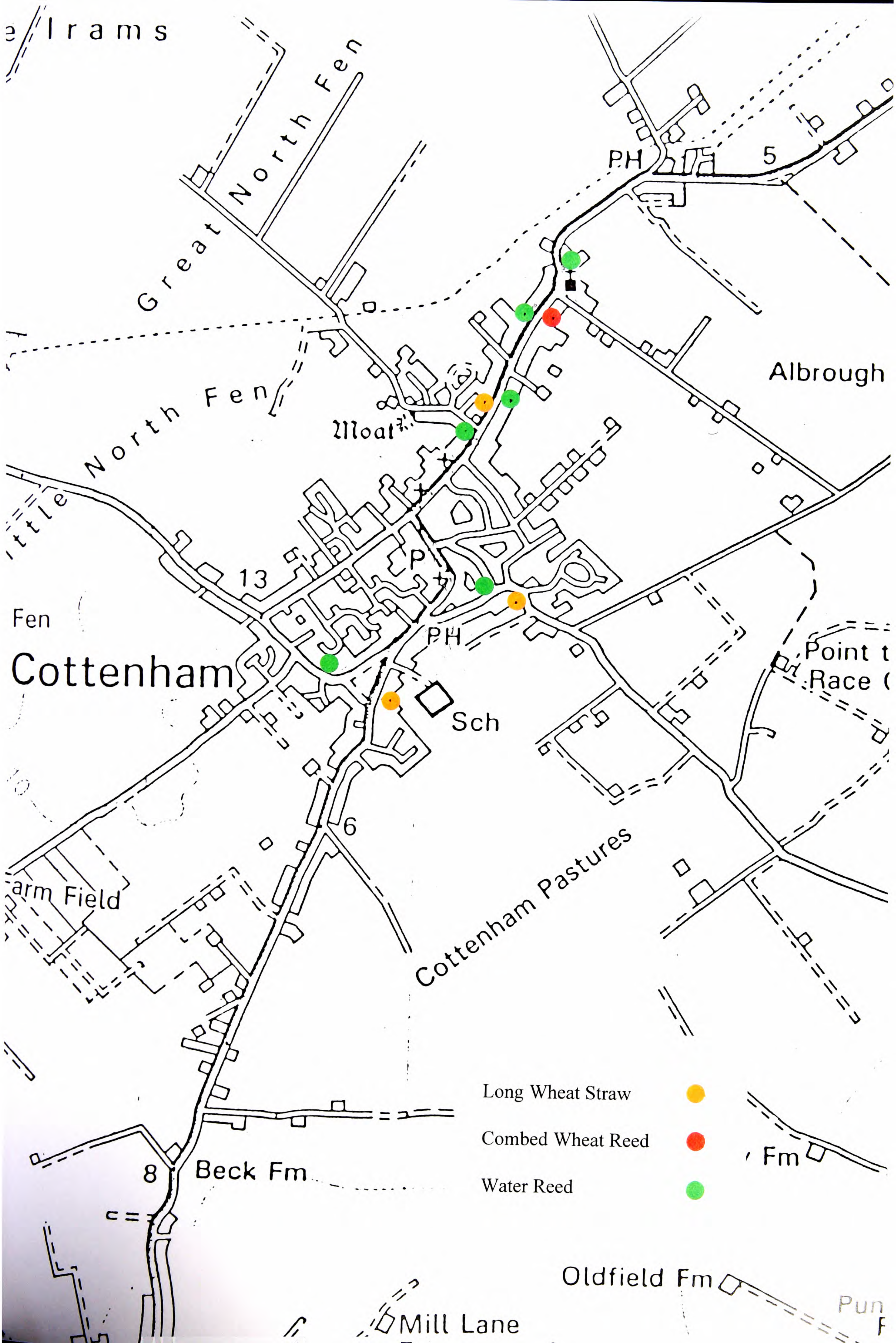
34%
33%
Long Wheat Straw
Combed Wheat Reed
Water Reed


Moat
Brinkley
Park Wood
Glebe Fm
Willingham Green
Hall Fm
Carlton
99
Cocksedge Fm
98
PH
Long Wheat Straw
Combed Wheat Reed
Water Reed

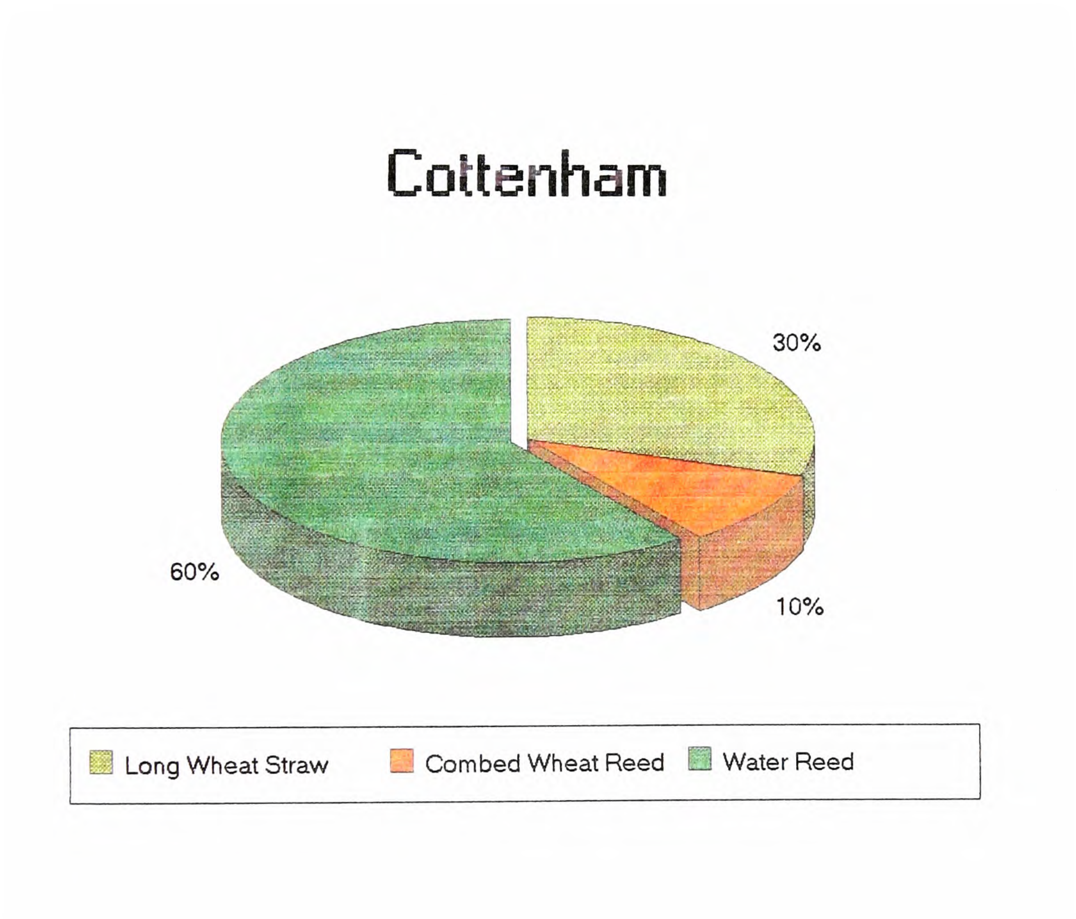

Carlton
50%
50%
0%
Long Wheat Straw
Combed Wheat Reed
Water Reed


Shudy Camps
Shudy Camps Park
109
Nosterfield End
106
Castle Camps
Camps Hall
123
Moat Fm
Castle Fm
114
Motte & Bailey
Camps End
Cooper's Fm
126
126
Browning's Fm
Little Biggin Common
Moat
116
Olmstead Hall
62
Great Bendysh Wood
112
Long Wheat Straw
Combed Water Reed
Water Reed


Caslte Camps
33%
61%
6%
Long Wheat Straw
Combed Wheat Reed
Water Reed



Irams
Great North Fen
Little North Fen
Moat
PH
5
Albrough
13
P
Fen
Cottenham
PH
Point to Point
Race C
Sch
6
Farm Field
Cottenham Pastures
Long Wheat Straw
Combed Wheat Reed
Water Reed
Fm
8
Beck Fm
Oldfield Fm
Mill Lane
Pun


Cottenham
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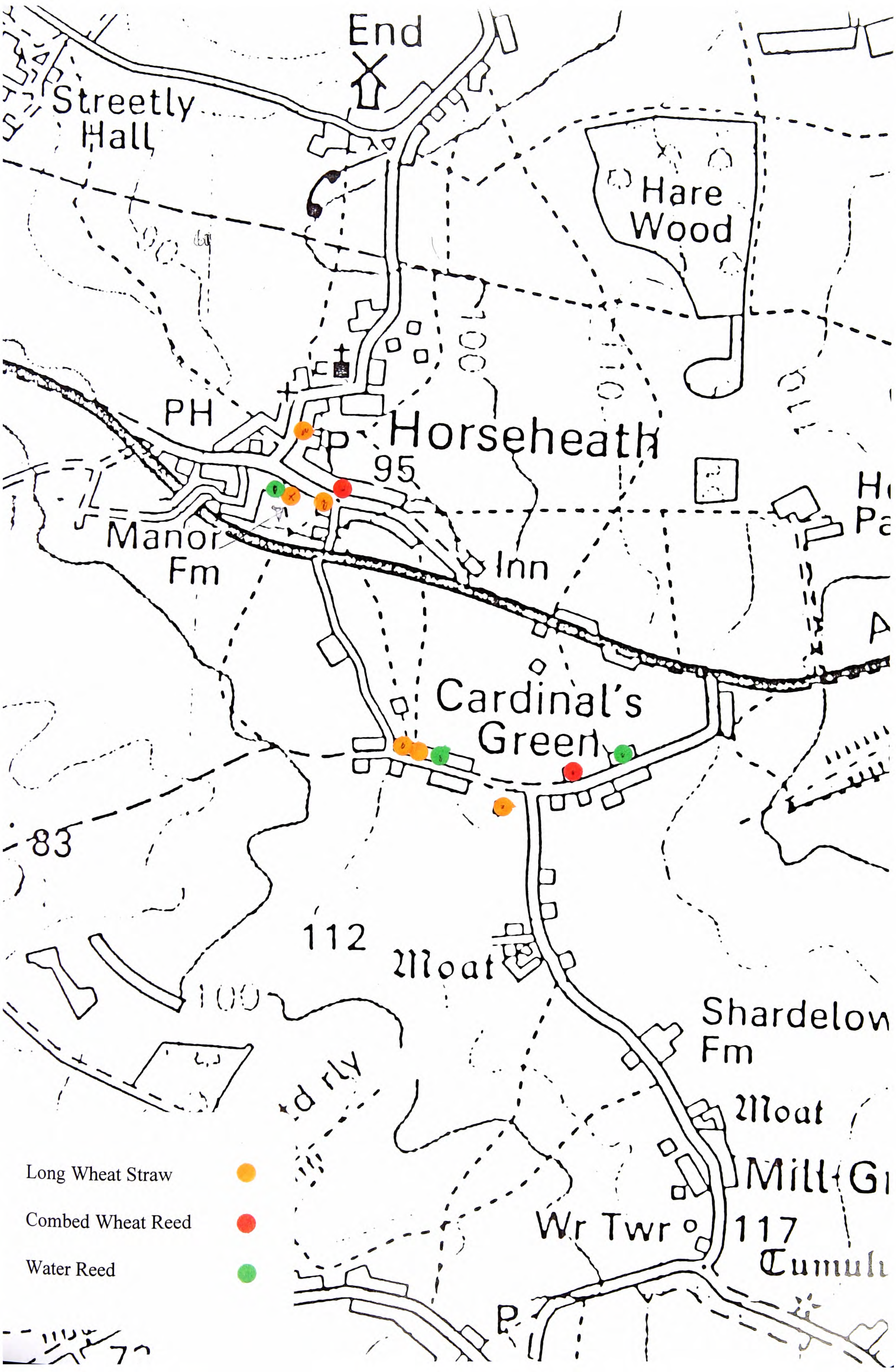
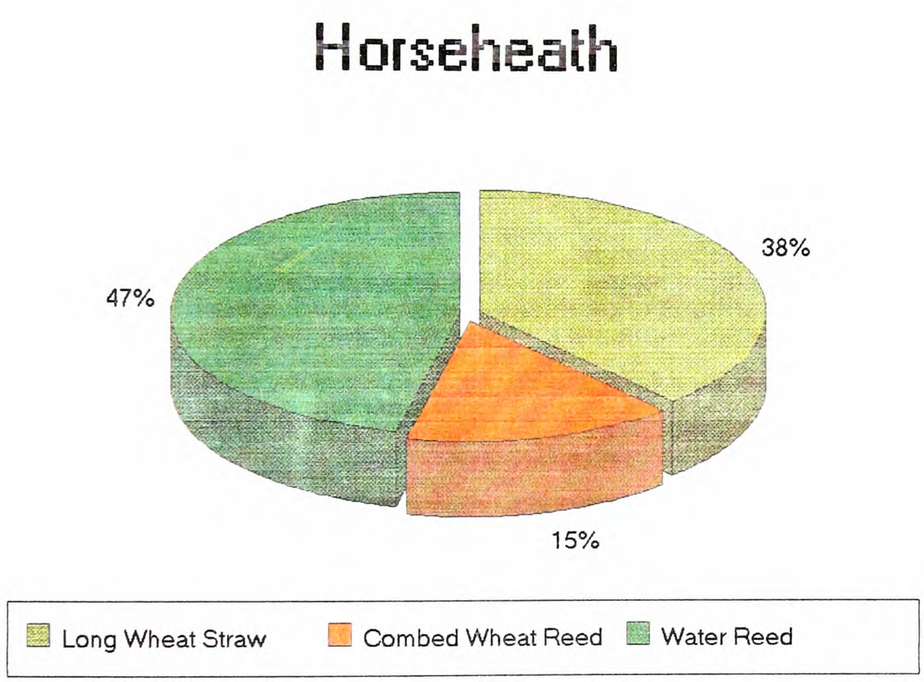
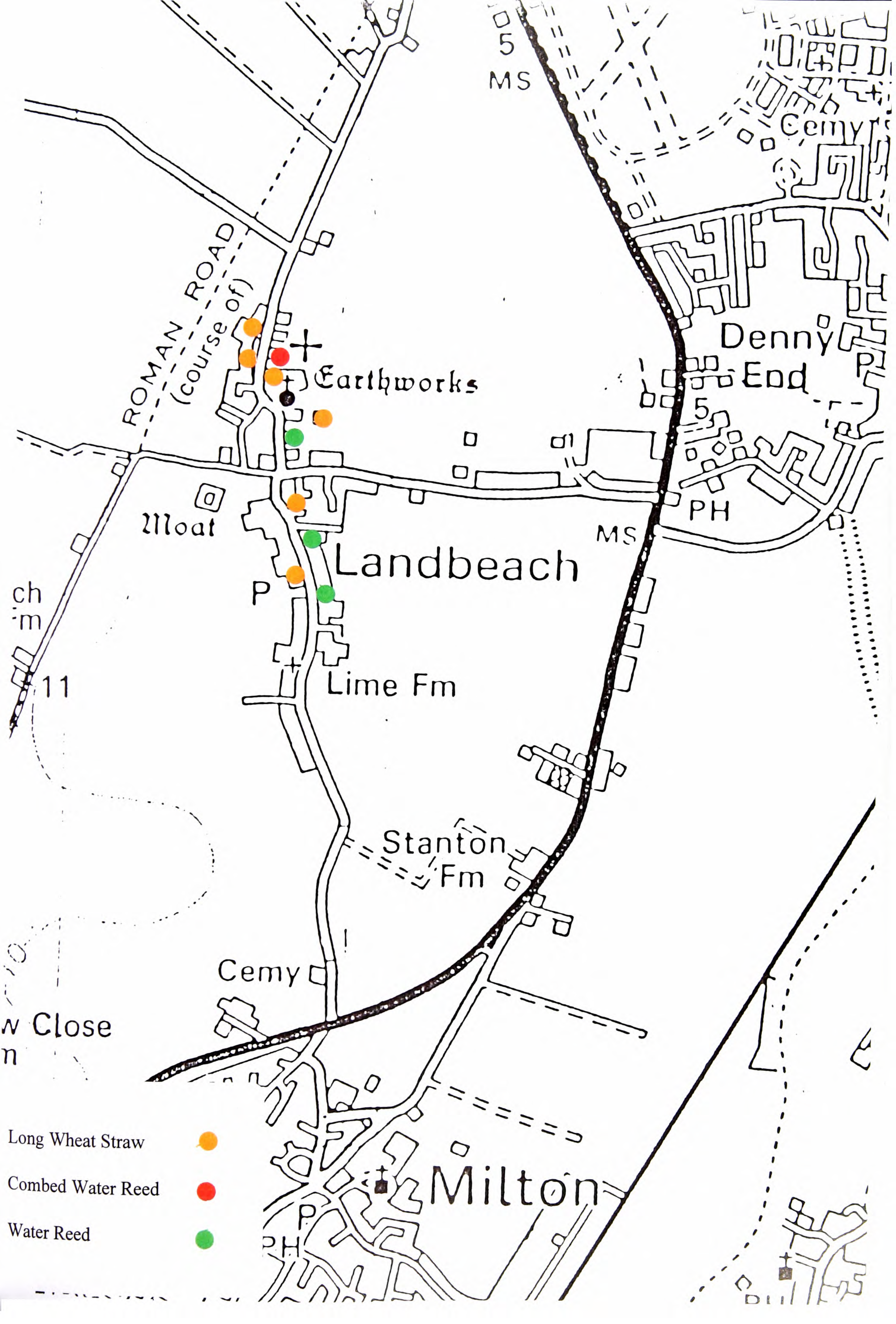
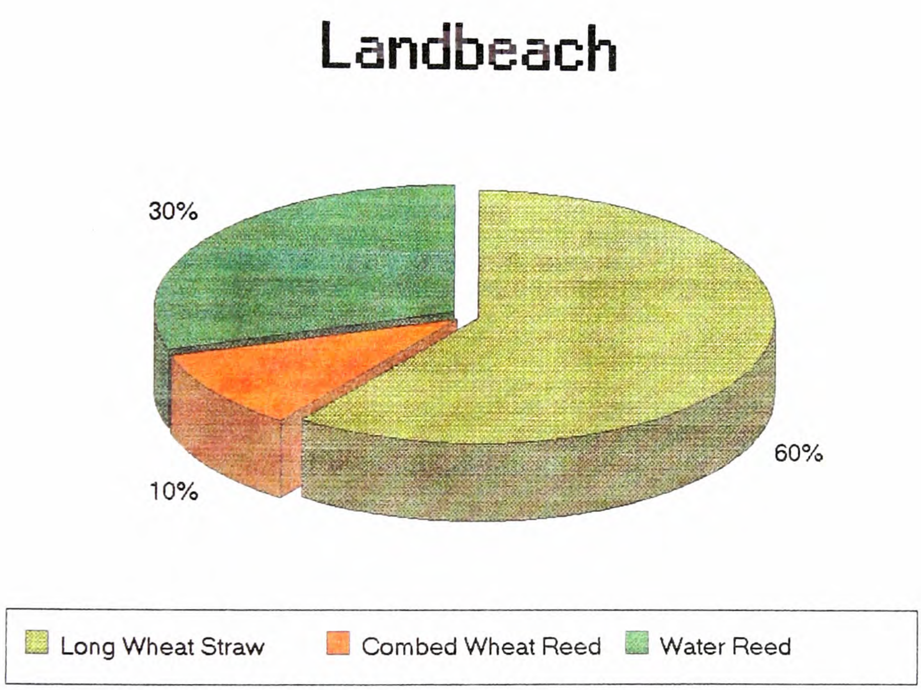
60%
10%
Long Wheat Straw
Combed Wheat Reed
Water Reed

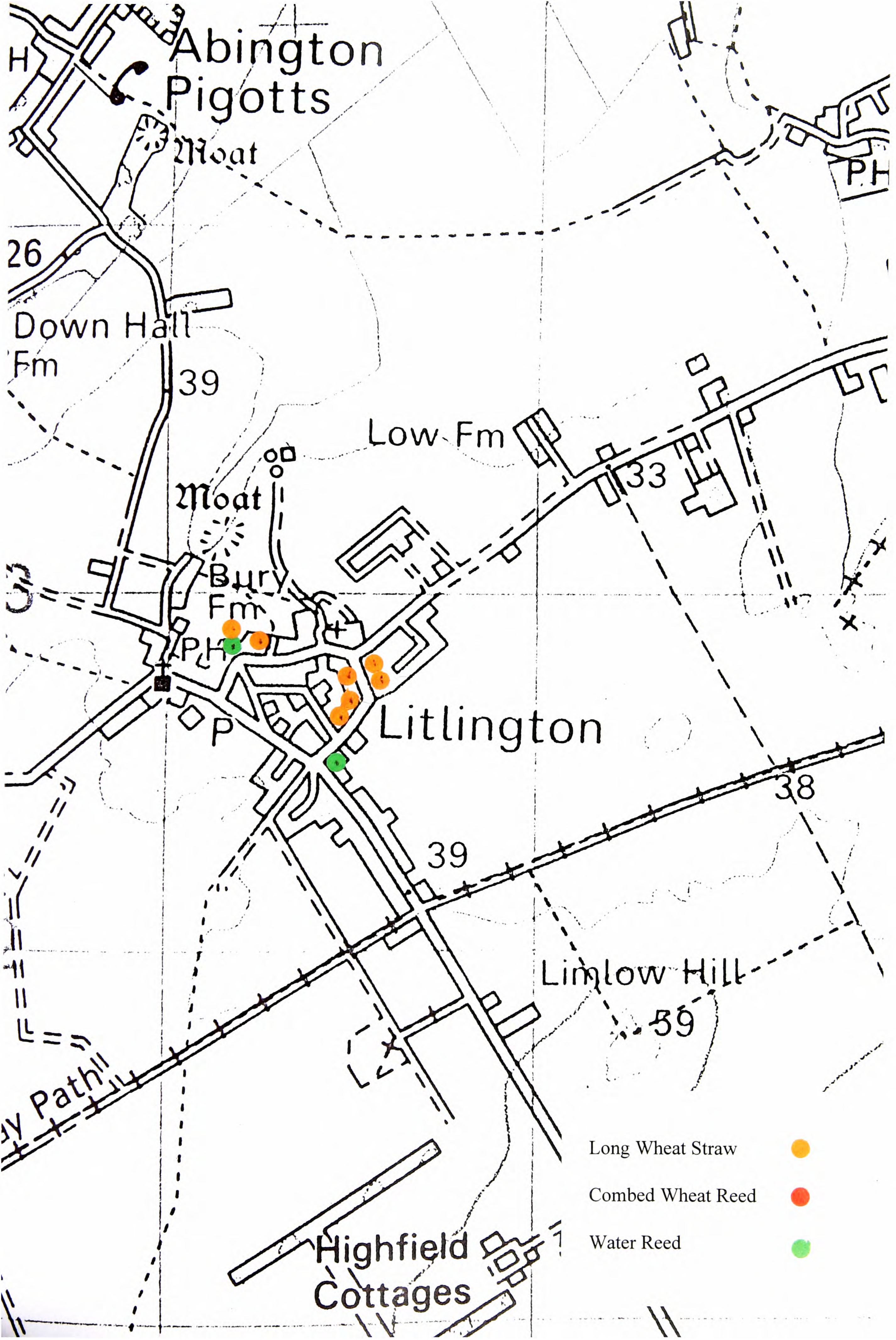

End
Streetly Hall
Hare Wood
PH
P
Horseheath
95
Manor Fm
Inn
Cardinal's Green
83
112
Moat
100
d rly
Shardelow Fm
Moat
Wr Twr
117
P
Long Wheat Straw
Combed Wheat Reed
Water Reed


Horseheath
38%
47%
15%
Long Wheat Straw
Combed Wheat Reed
Water Reed

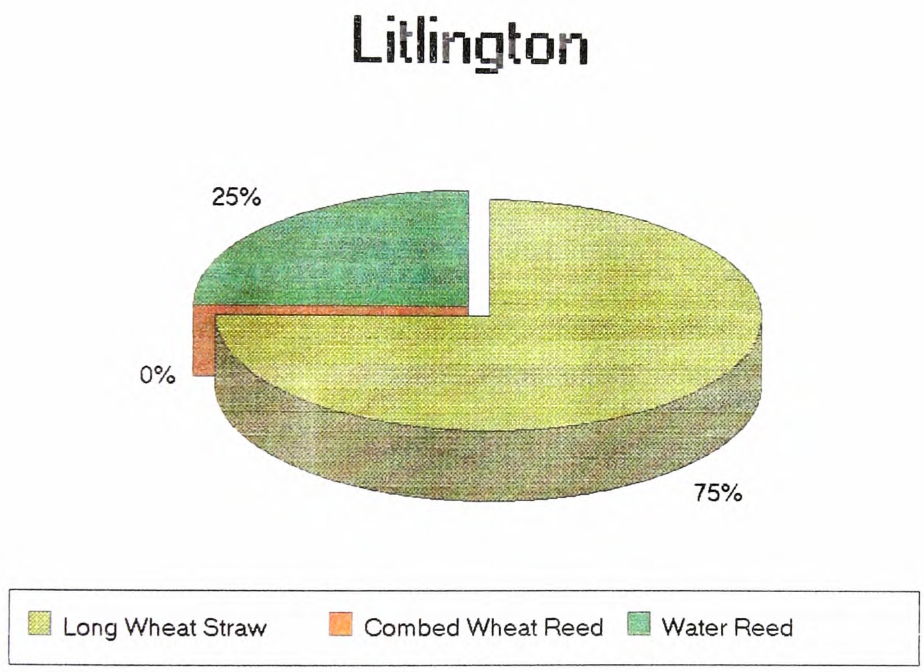


ROMAN ROAD
(course of)
Earthworks
Moat
Landbeach
P
Lime Fm
Stanton Fm
Cemy
Denny End
PH
MS
5
Cemy
Milton
Close
11
Long Wheat Straw
Combed Water Reed
Water Reed

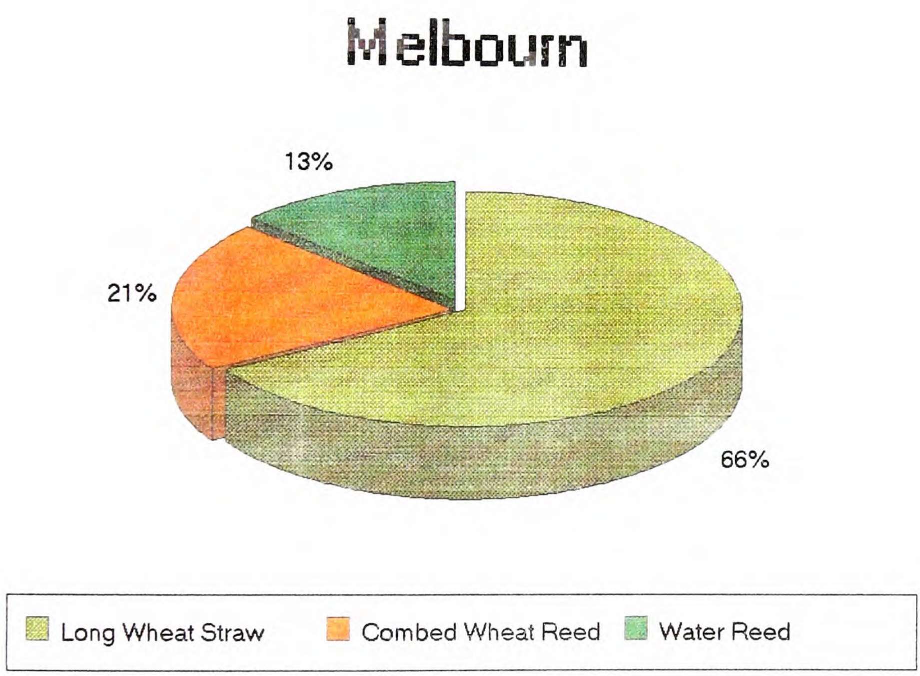

Landbeach
30%
60%
10%
Long Wheat Straw
Combed Wheat Reed
Water Reed

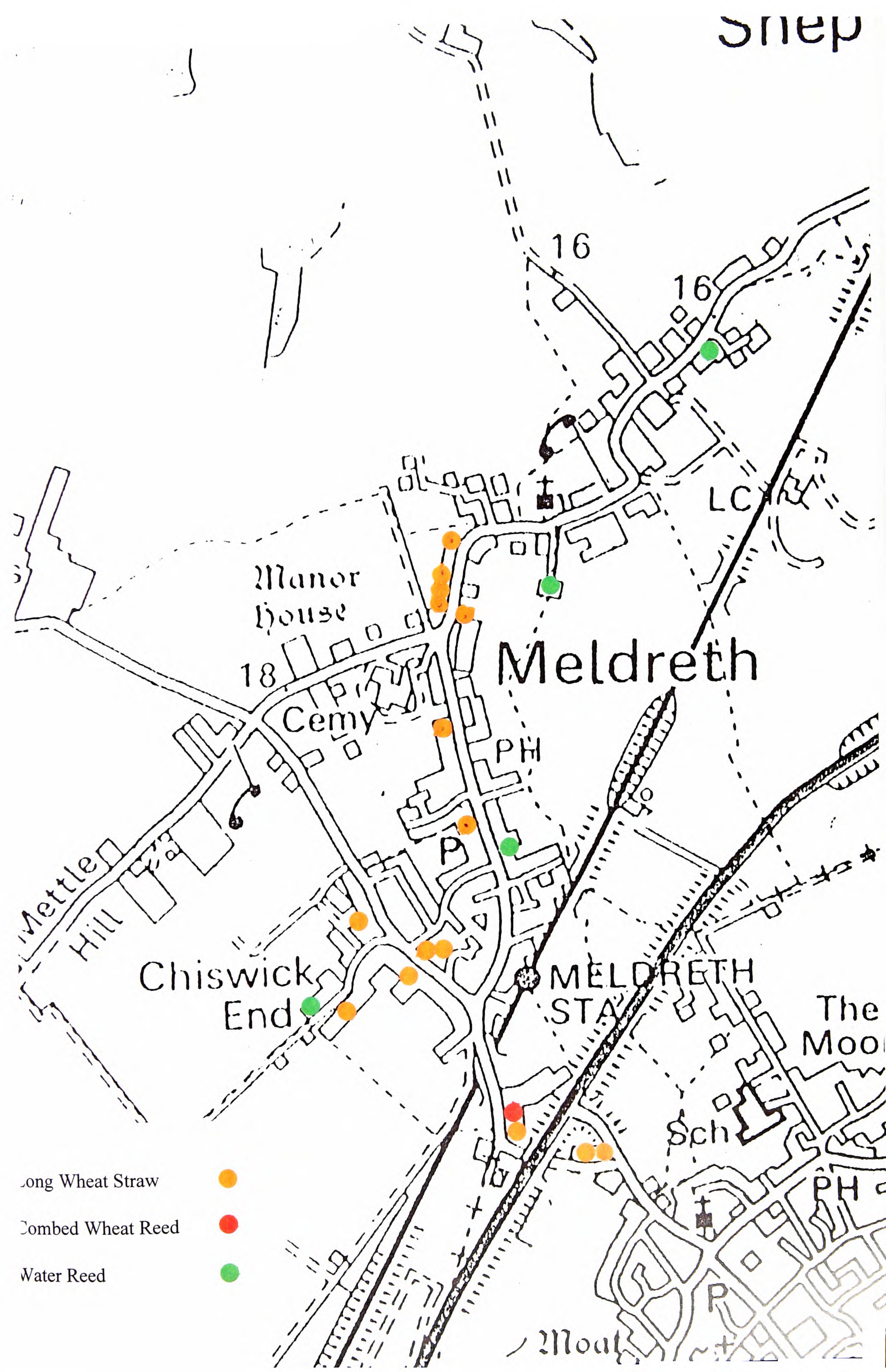


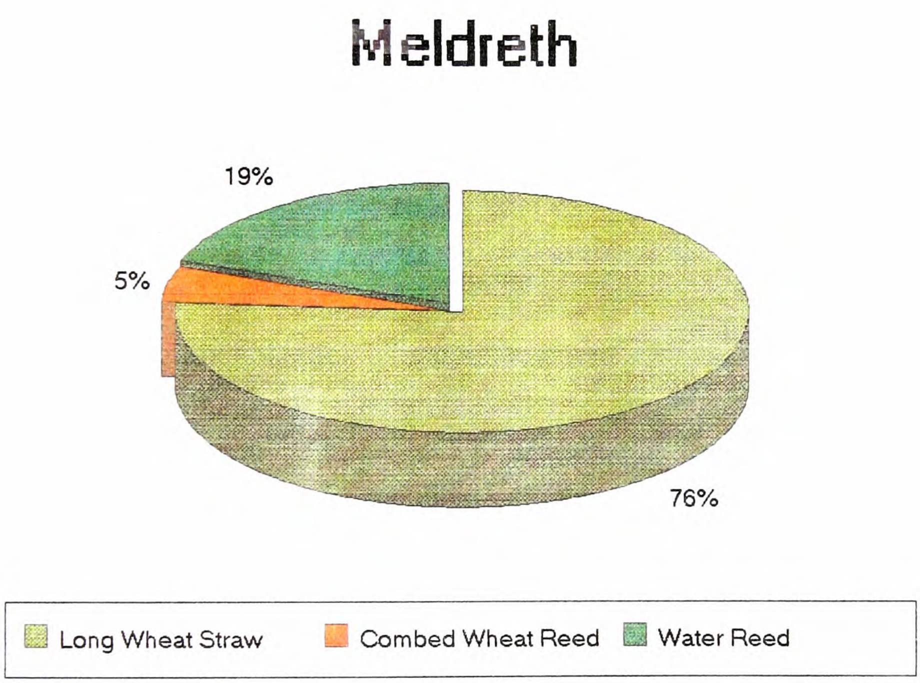
Abington
Pigotts
Moat
PH
26
Down Hall
Fm
39
Low Fm
33
Moat
Bury
Fm
PH
P
Litlington
38
39
Limlow Hill
59
Path
Highfield
Cottages
Long Wheat Straw
Combed Wheat Reed
Water Reed

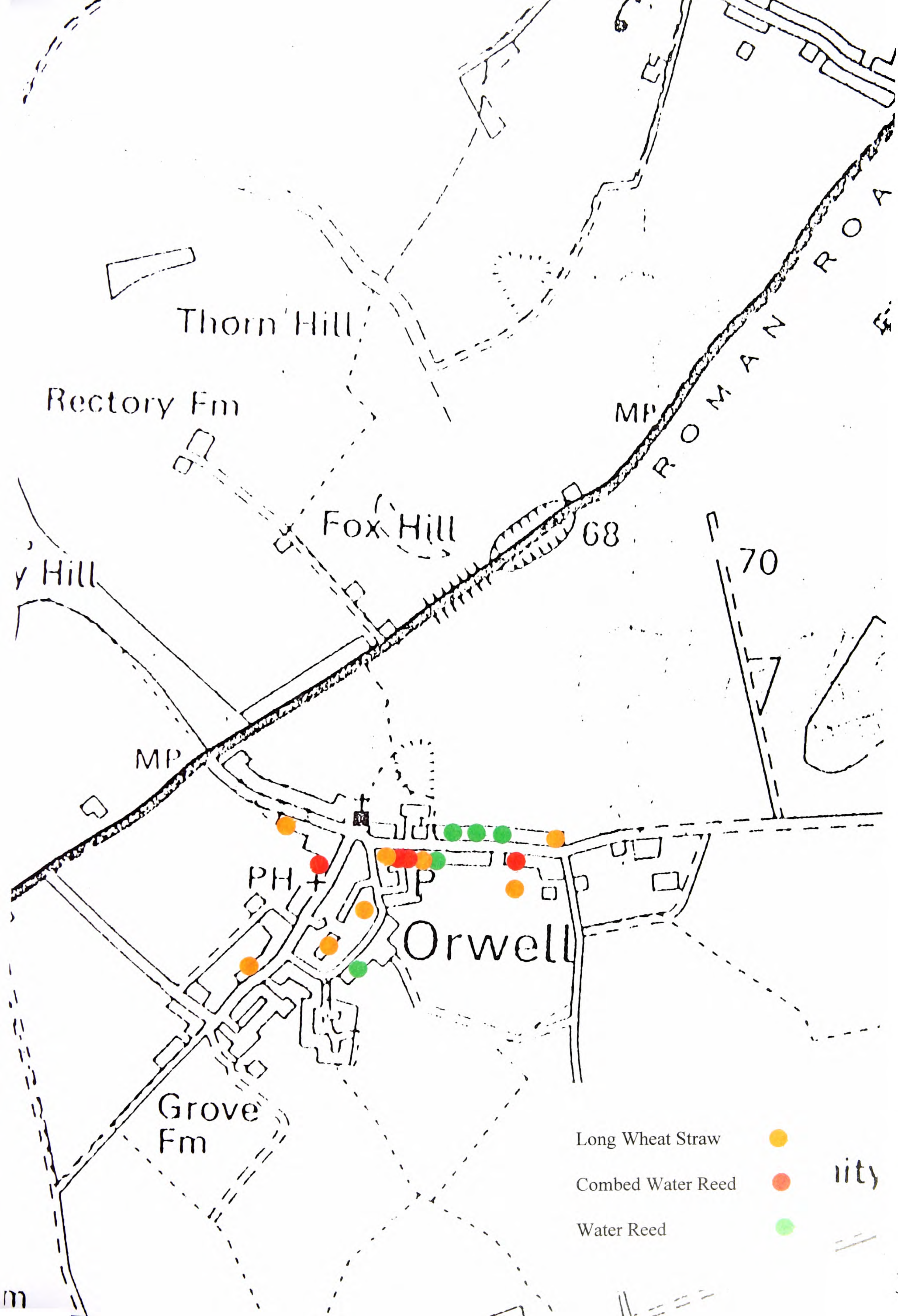

Litlington
25%
0%
75%
Long Wheat Straw
Combed Wheat Reed
Water Reed

Meldreth
PH
P
MELDRETH
STA
The
Moor
Sch
PH
MS
19
East Fm.
Moat
Melbourn
Bury
Melbourn
27
Tumulus
enlow
Summer House
Long Wheat Straw
Combed Wheat Reed
Water Reed

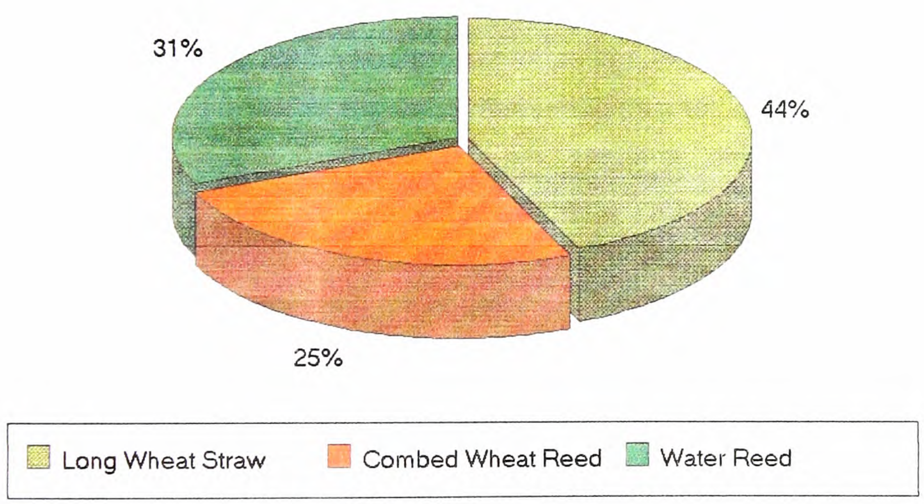

Melbourn
13%
21%
66%
Long Wheat Straw
Combed Wheat Reed
Water Reed

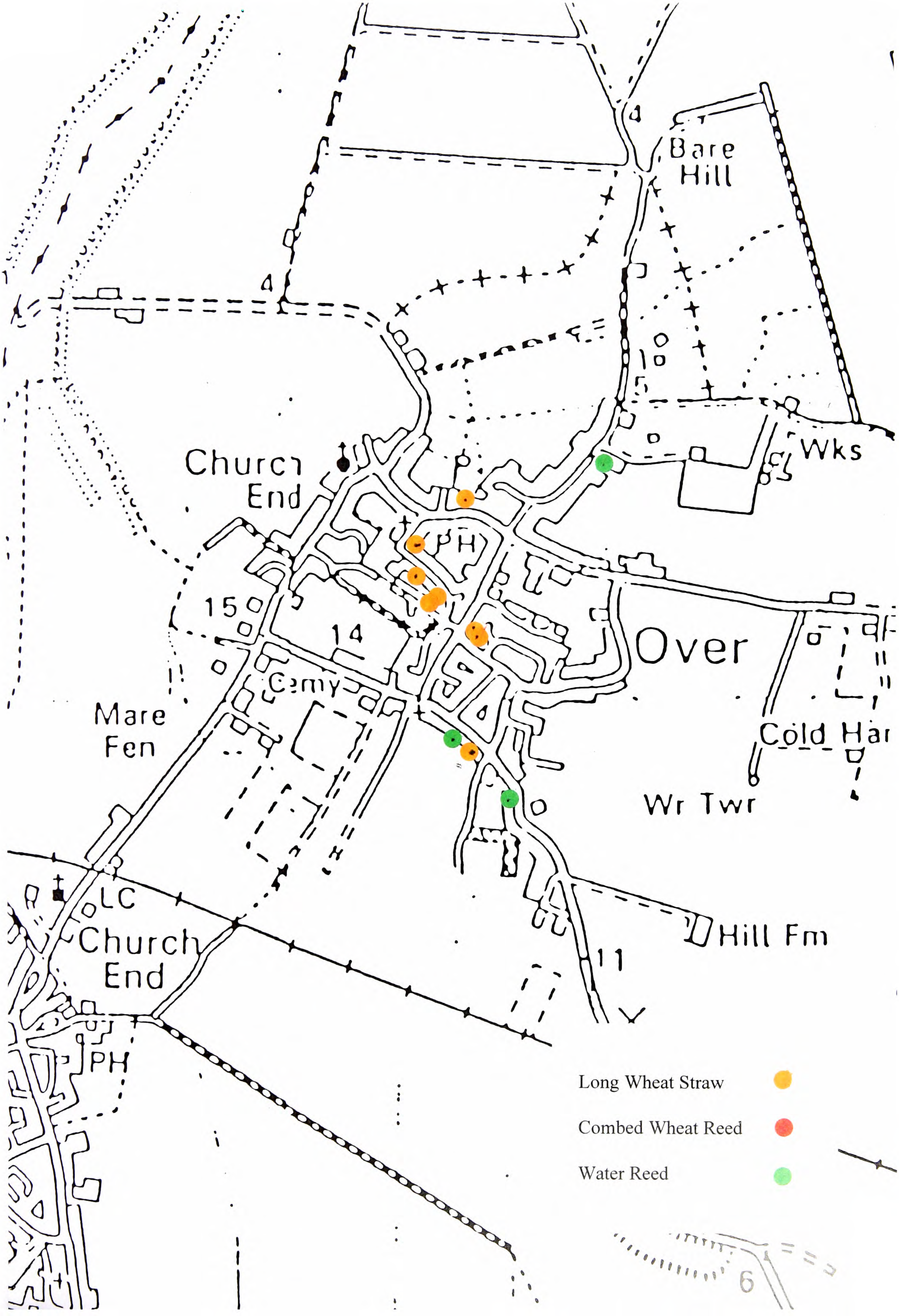

16
16
LC
Manor House
18
Meldreth
Cemy
PH
P
Mettle Hill
Chiswick End
MELDRETH STA
Sch
PH
P
Long Wheat Straw
Combed Wheat Reed
Water Reed


Meldreth
19%
5%
76%
Long Wheat Straw
Combed Wheat Reed
Water Reed

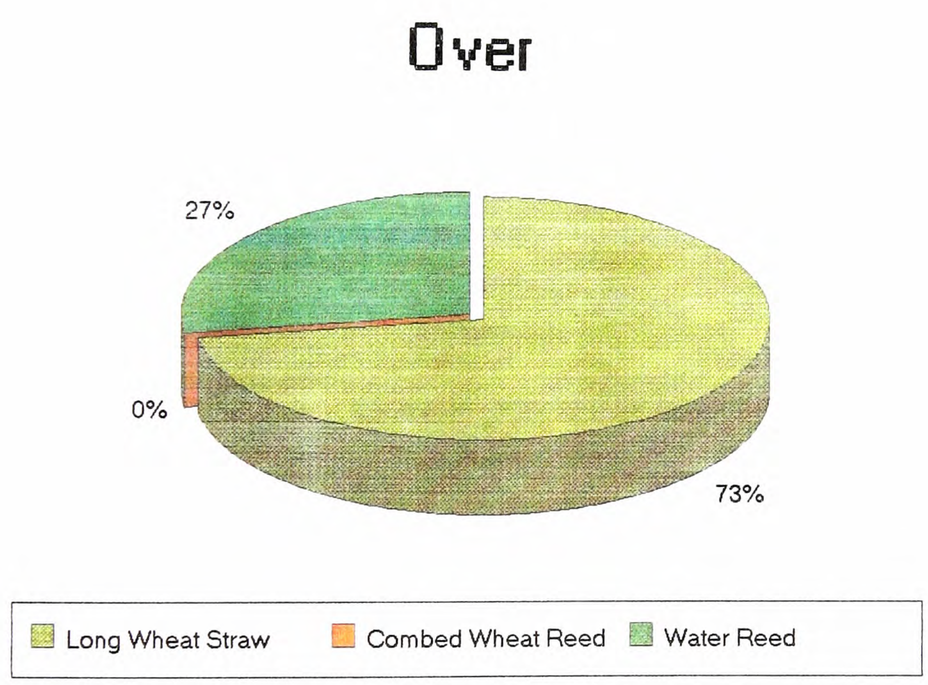

Thorn Hill
Rectory Fm
Fox Hill
68
70
MP
ROMAN ROAD
y Hill
MP
PH
P
Orwell
Grove Fm
Long Wheat Straw
Combed Water Reed
Water Reed

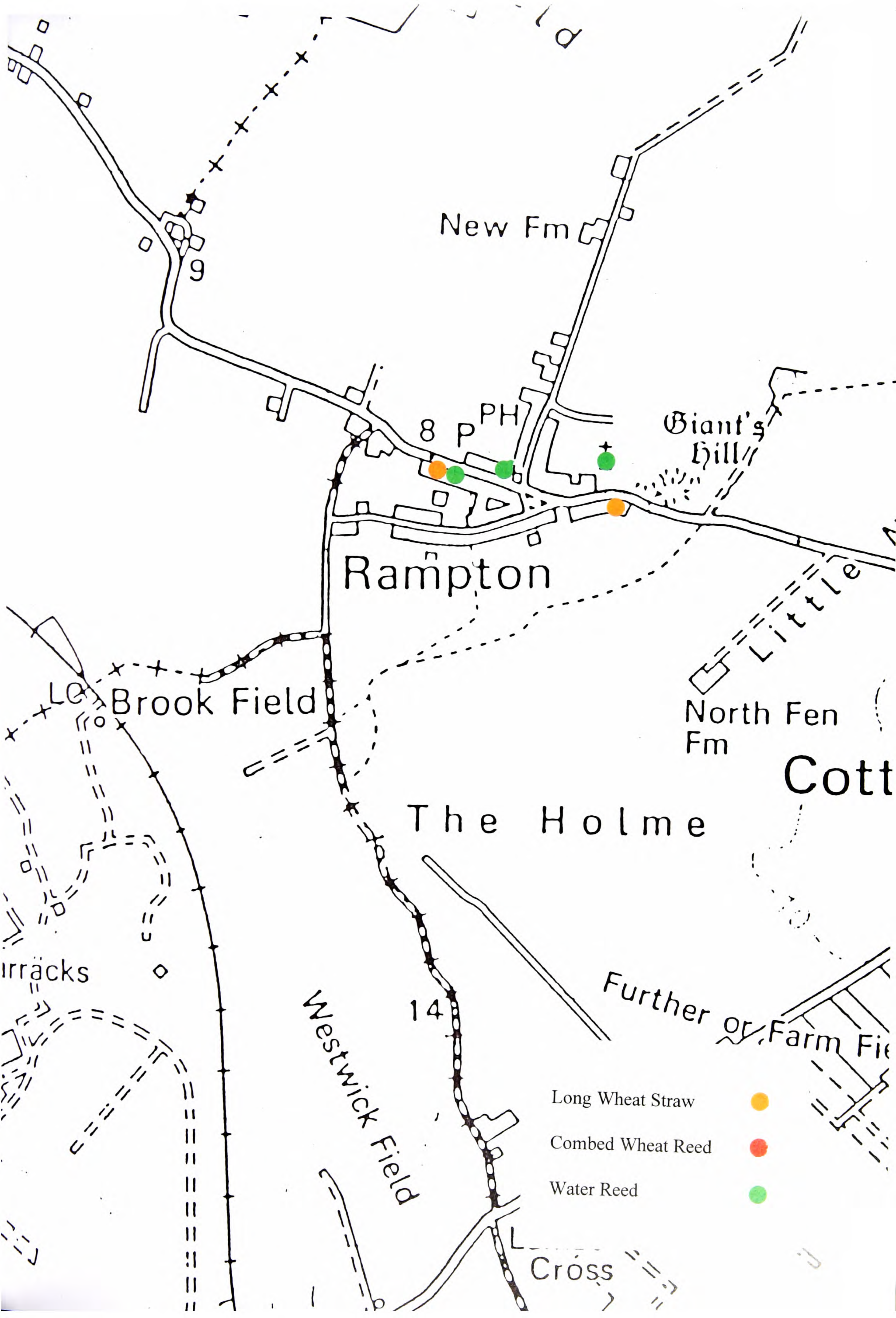
Orwell



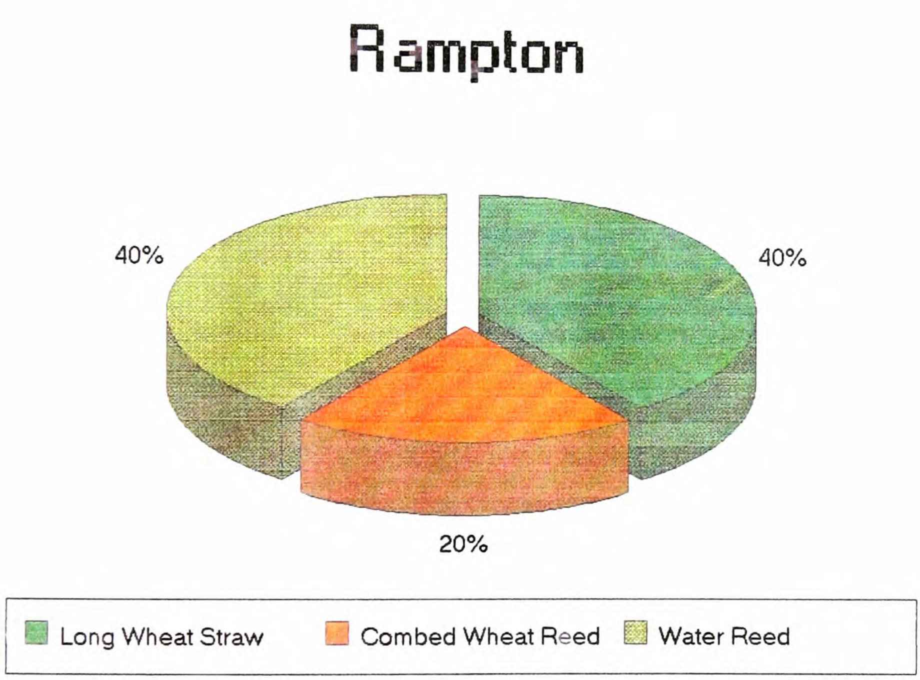


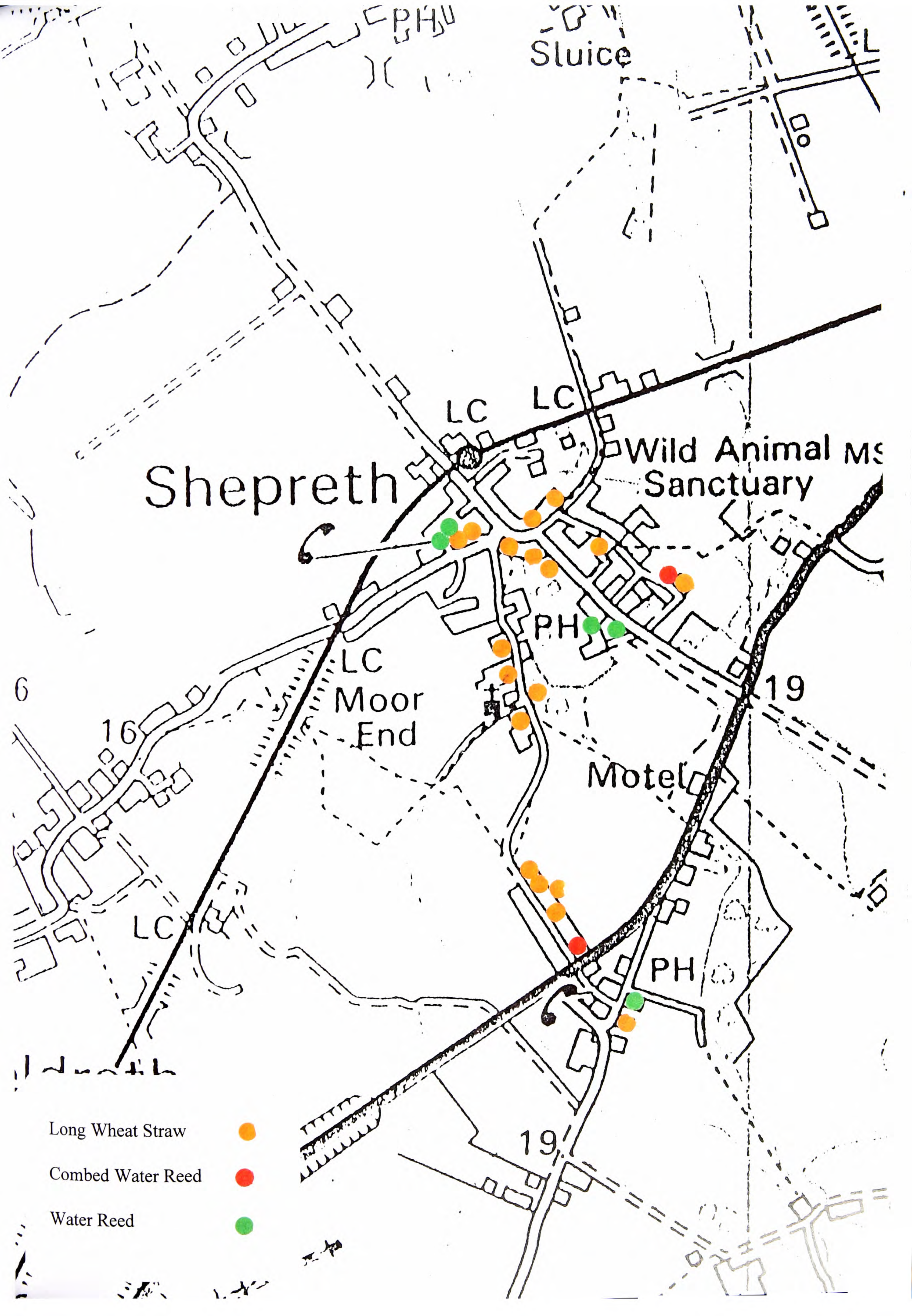
Bare
Hill
Wks
Church
End
PH
15
14
Over
Cemy
Mare
Fen
Cold Har
Wr Twr
LC
Church
End
Hill Fm
11
PH
6
Long Wheat Straw
Combed Wheat Reed
Water Reed


Over
27%
0%
73%
Long Wheat Straw
Combed Wheat Reed
Water Reed

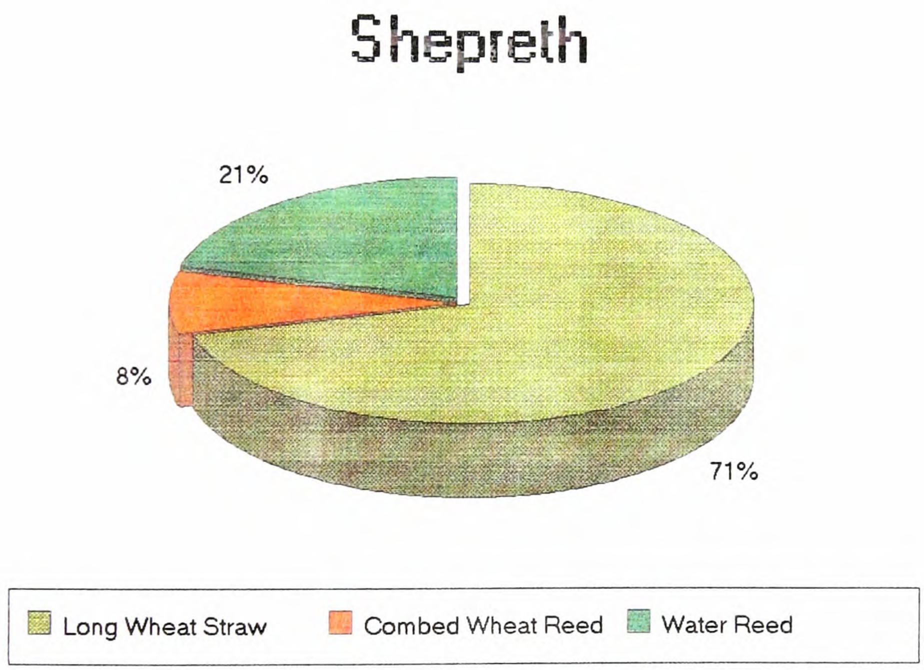


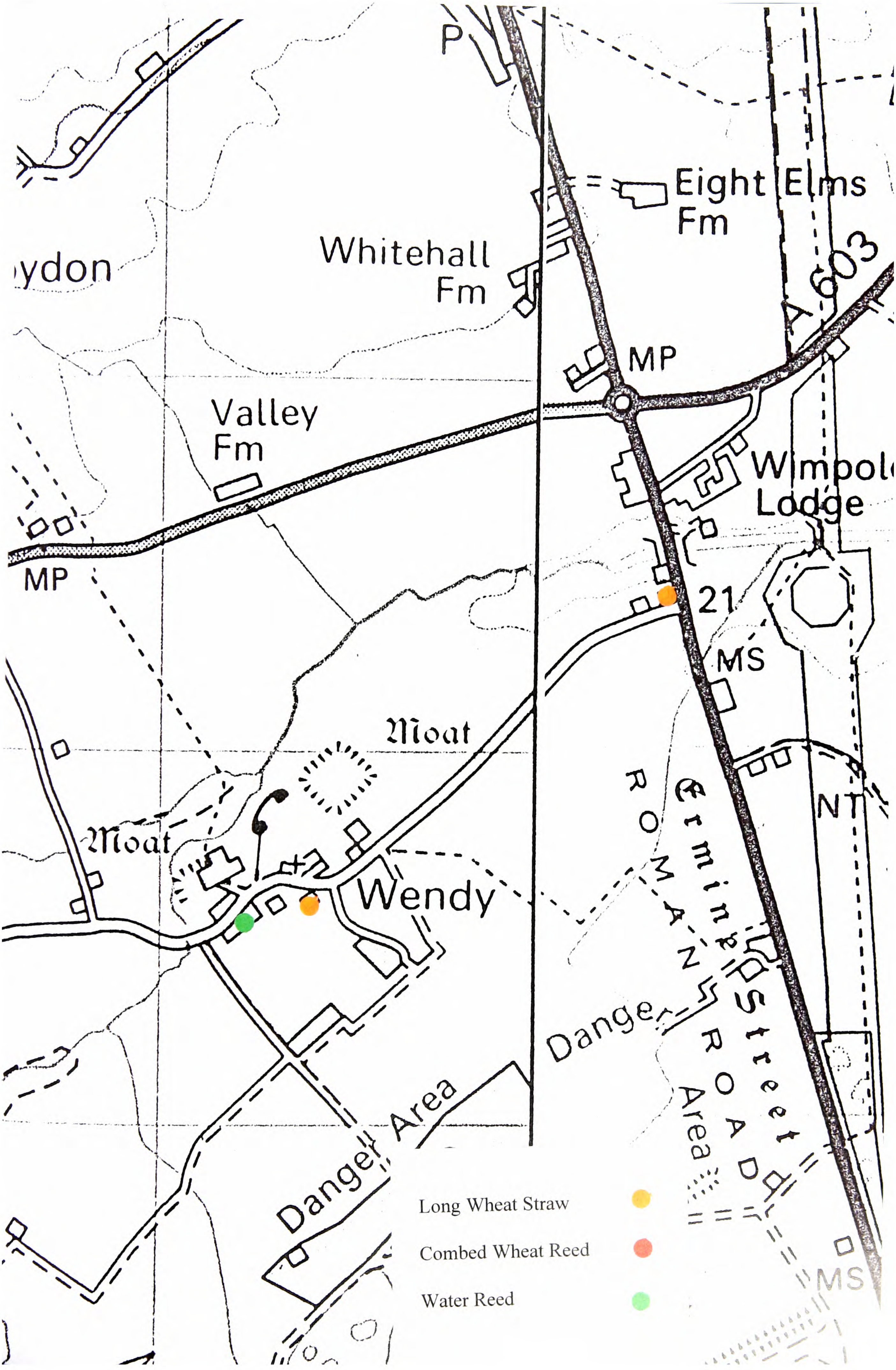
New Fm
9
8
P
PH
Giant's
Hill
Rampton
Brook Field
LC
North Fen
Fm
Cott
Little
The Holme
rracks
Westwick Field
14
Further or Farm Fi
Cross
Long Wheat Straw
Combed Wheat Reed
Water Reed

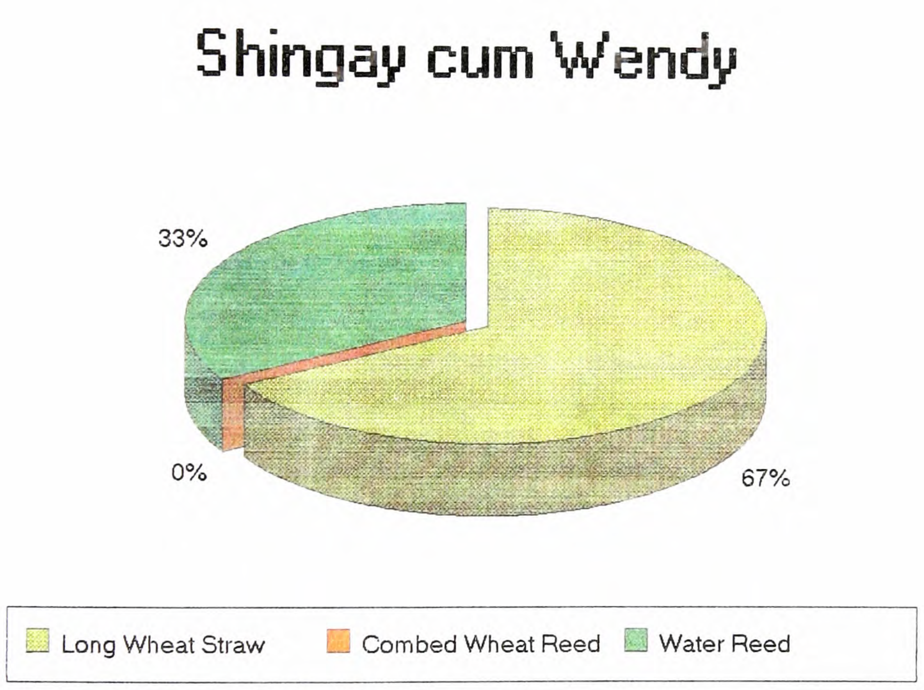

Rampton
40%
40%
20%
Long Wheat Straw
Combed Wheat Reed
Water Reed

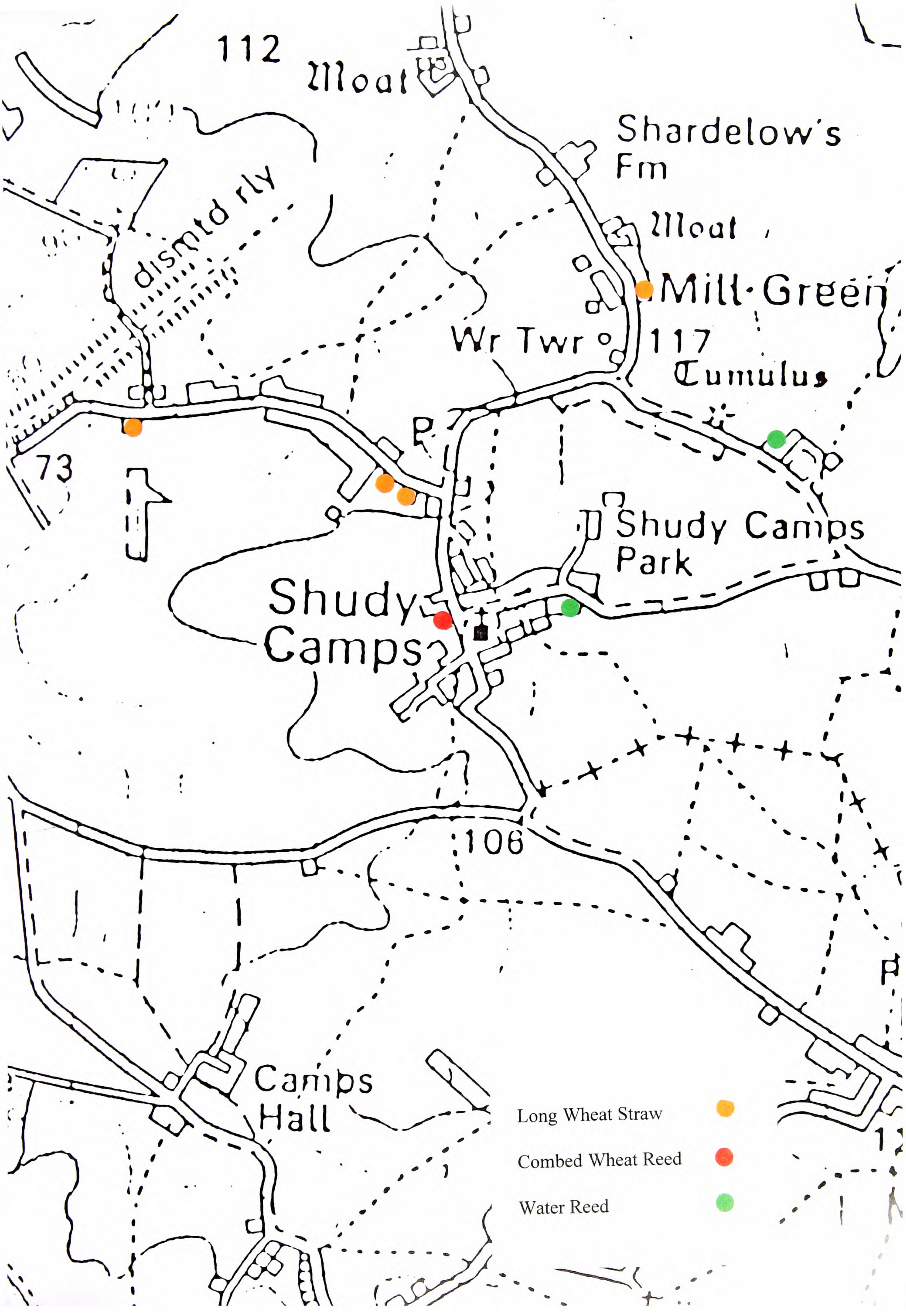


PH
Sluice
LC
LC
Shepreth
Wild Animal
Sanctuary
PH
LC
Moor
End
16
19
Motel
LC
PH
19
Long Wheat Straw
Combed Water Reed
Water Reed

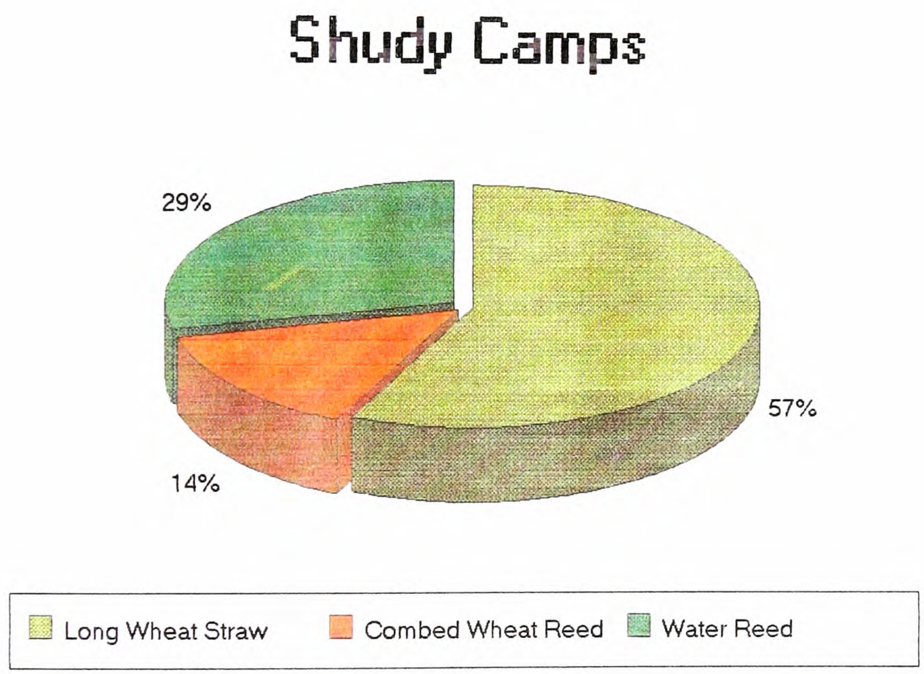

Shepreth
21%
8%
71%
Long Wheat Straw
Combed Wheat Reed
Water Reed

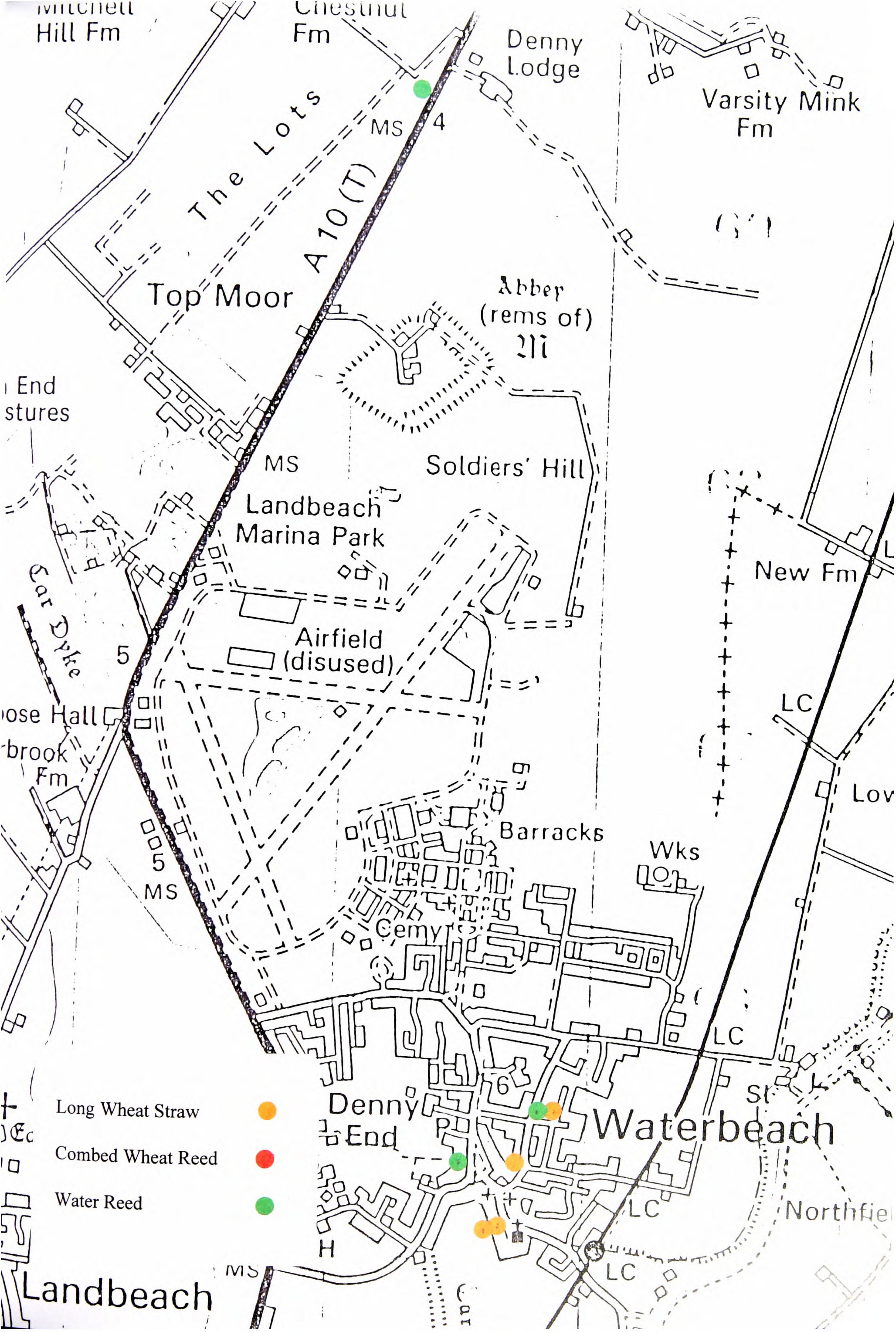

P
Eight Elms
Fm
Whitehall
Fm
ydon
A 603
MP
Valley
Fm
Wimpole
Lodge
MP
21
MS
Moat
Moat
Wendy
ROMAN ROAD
Ermine Street
NT
Danger Area
Danger Area
Danger Area
MS
Long Wheat Straw
Combed Wheat Reed
Water Reed


Shingay cum Wendy
33%
0%
67%
Long Wheat Straw
Combed Wheat Reed
Water Reed

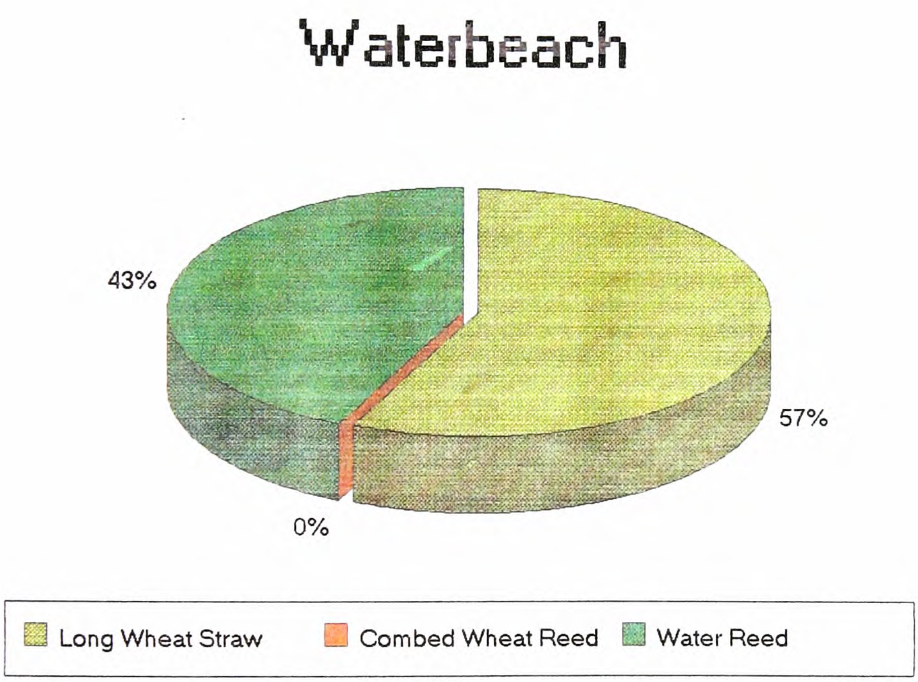


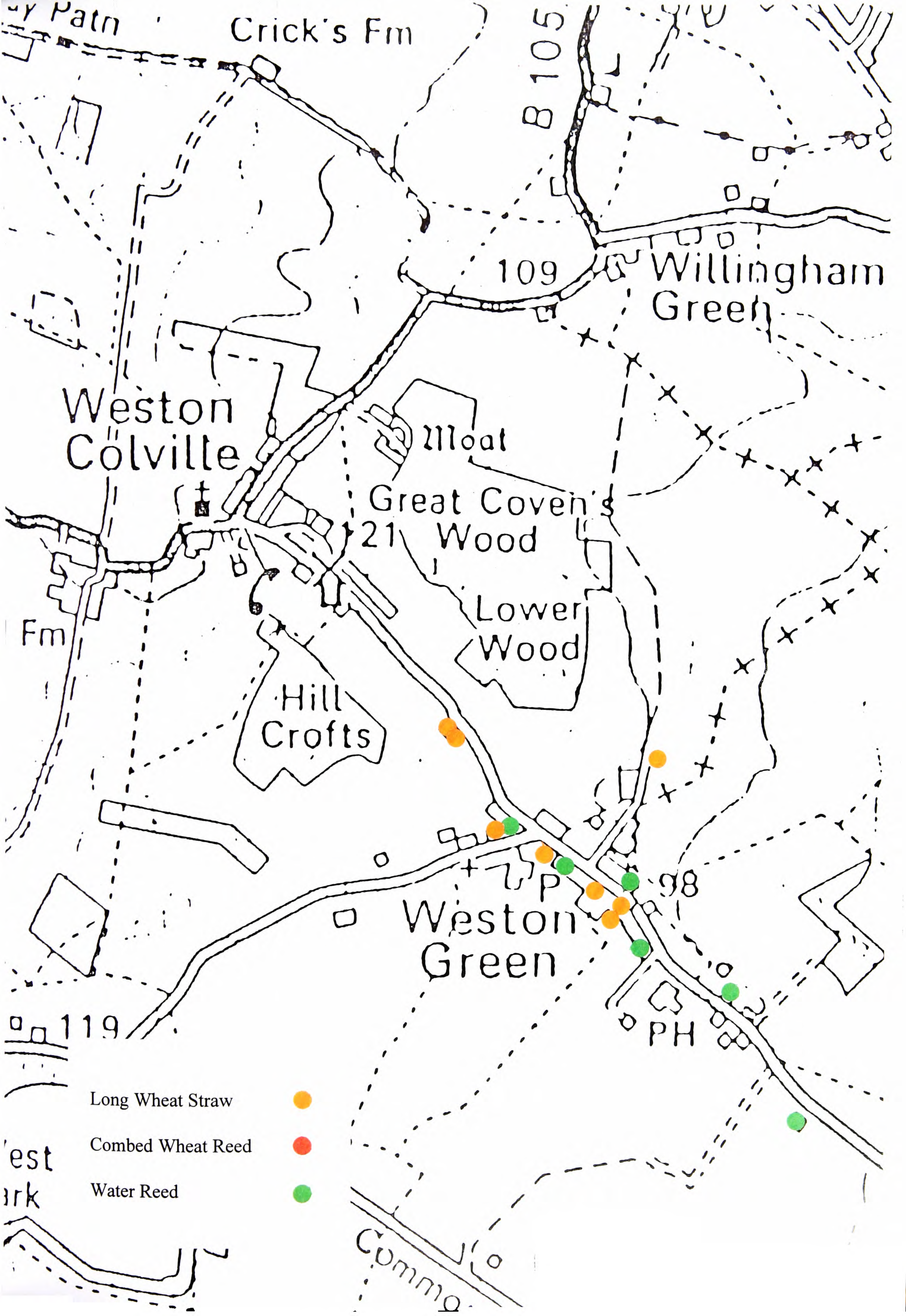
112
Moat
Shardelow's Fm
dismtd rly
Moat
Mill Green
Wr Twr
117
Cumulus
73
Shudy Camps Park
Shudy Camps
106
Camps Hall
Long Wheat Straw
Combed Wheat Reed
Water Reed


Shudy Camps
29%
57%
14%
Long Wheat Straw
Combed Wheat Reed
Water Reed

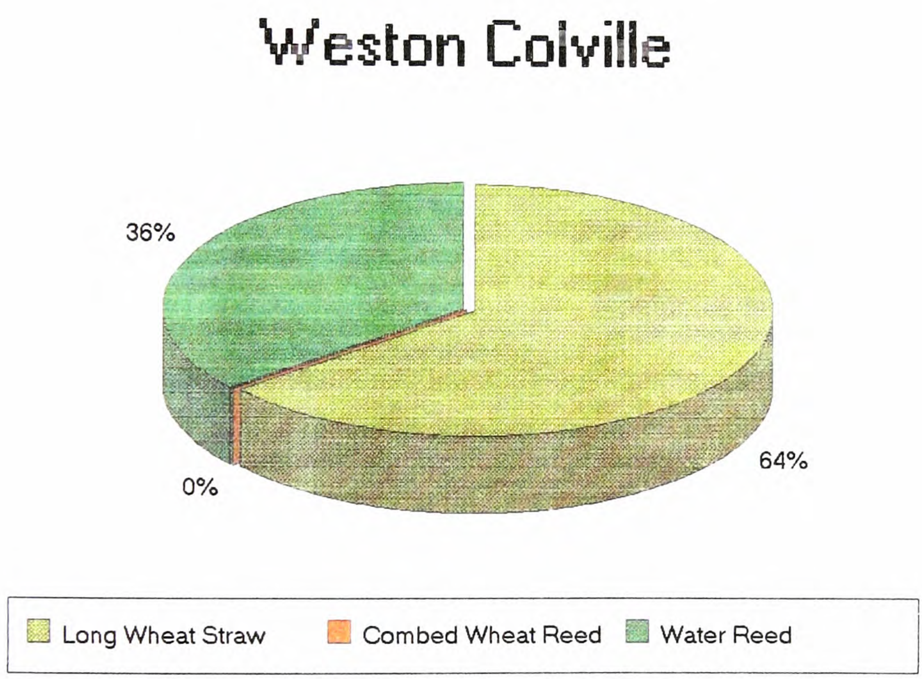


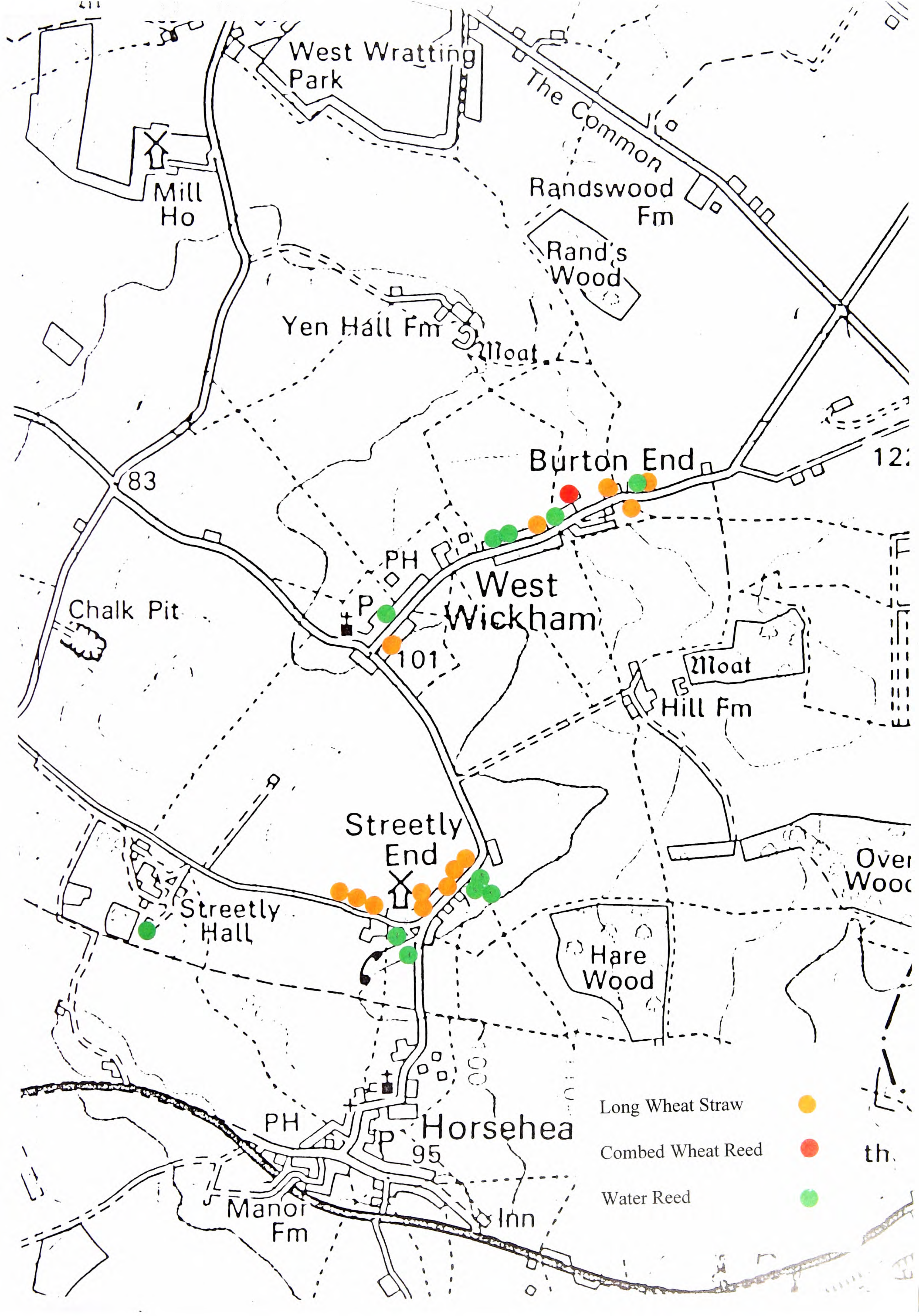
Hill Fm
Fm
Denny Lodge
Varsity Mink Fm
The Lots
MS
4
A10(T)
Top Moor
Abbey (rems of)
End
MS
Soldiers' Hill
Landbeach Marina Park
Car Dyke
5
Airfield (disused)
New Fm
LC
Barracks
Wks
5
MS
Cemy
6
Denny End
Waterbeach
LC
LC
LC
H
Landbeach
Long Wheat Straw
Combed Wheat Reed
Water Reed

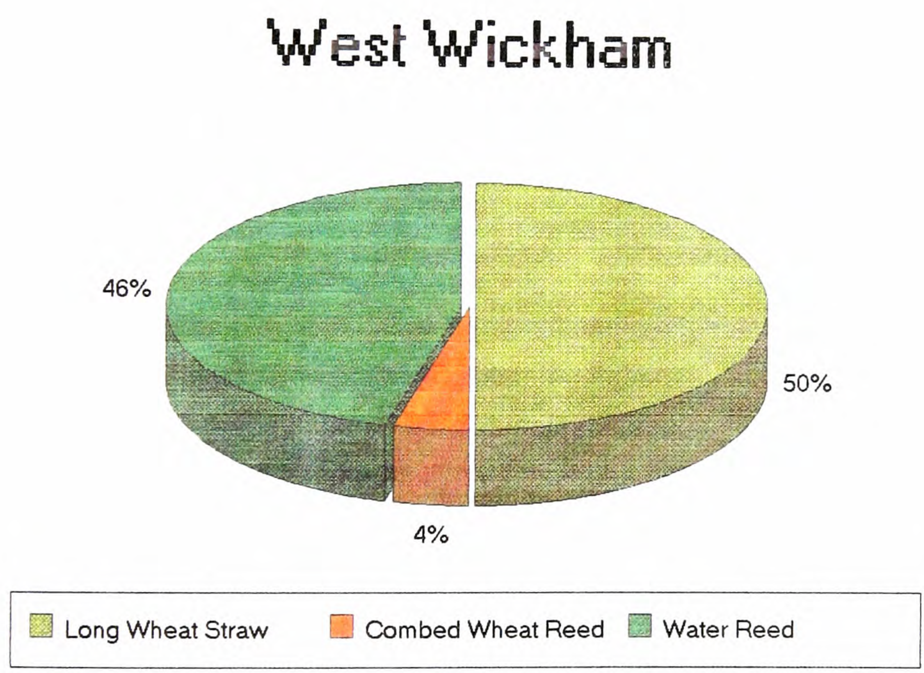

Waterbeach
43%
57%
0%
Long Wheat Straw
Combed Wheat Reed
Water Reed

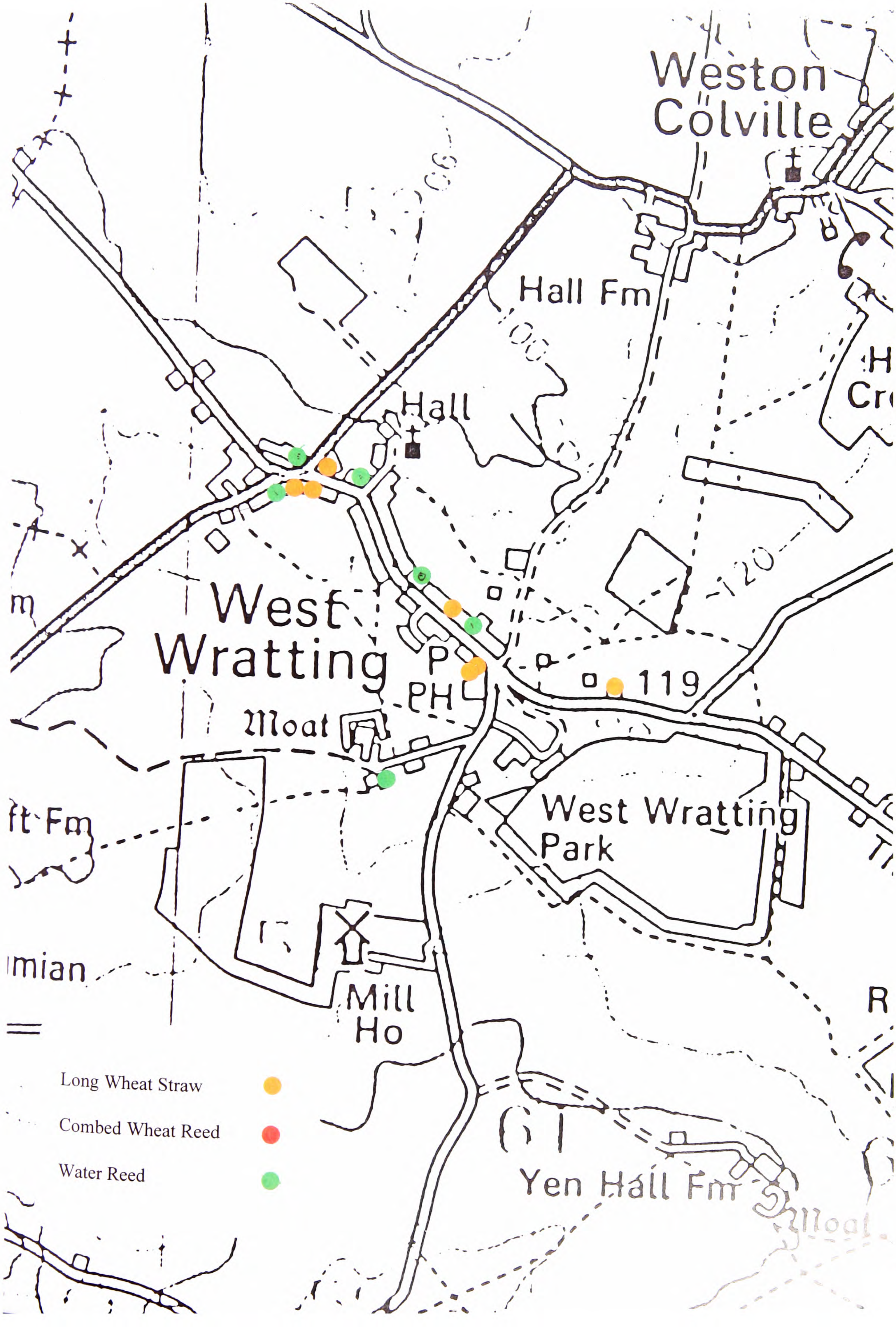


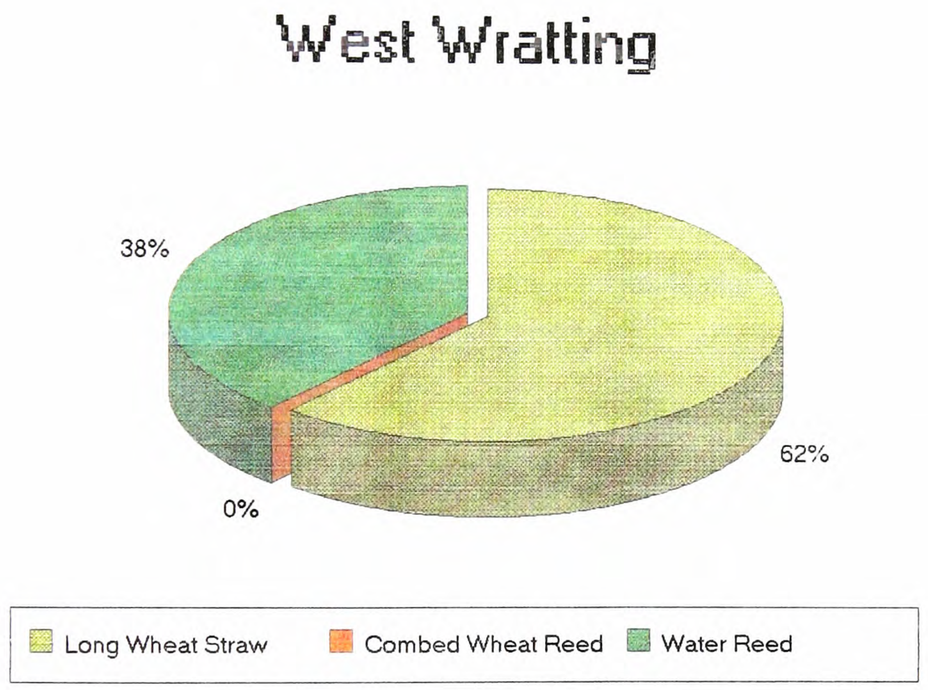
Crick's Fm
B 105
109
Willingham Green
Weston Colville
Moat
Great Coven's Wood
121
Lower Wood
Fm
Hill Crofts
P
98
Weston Green
PH
119
Long Wheat Straw
Combed Wheat Reed
Water Reed

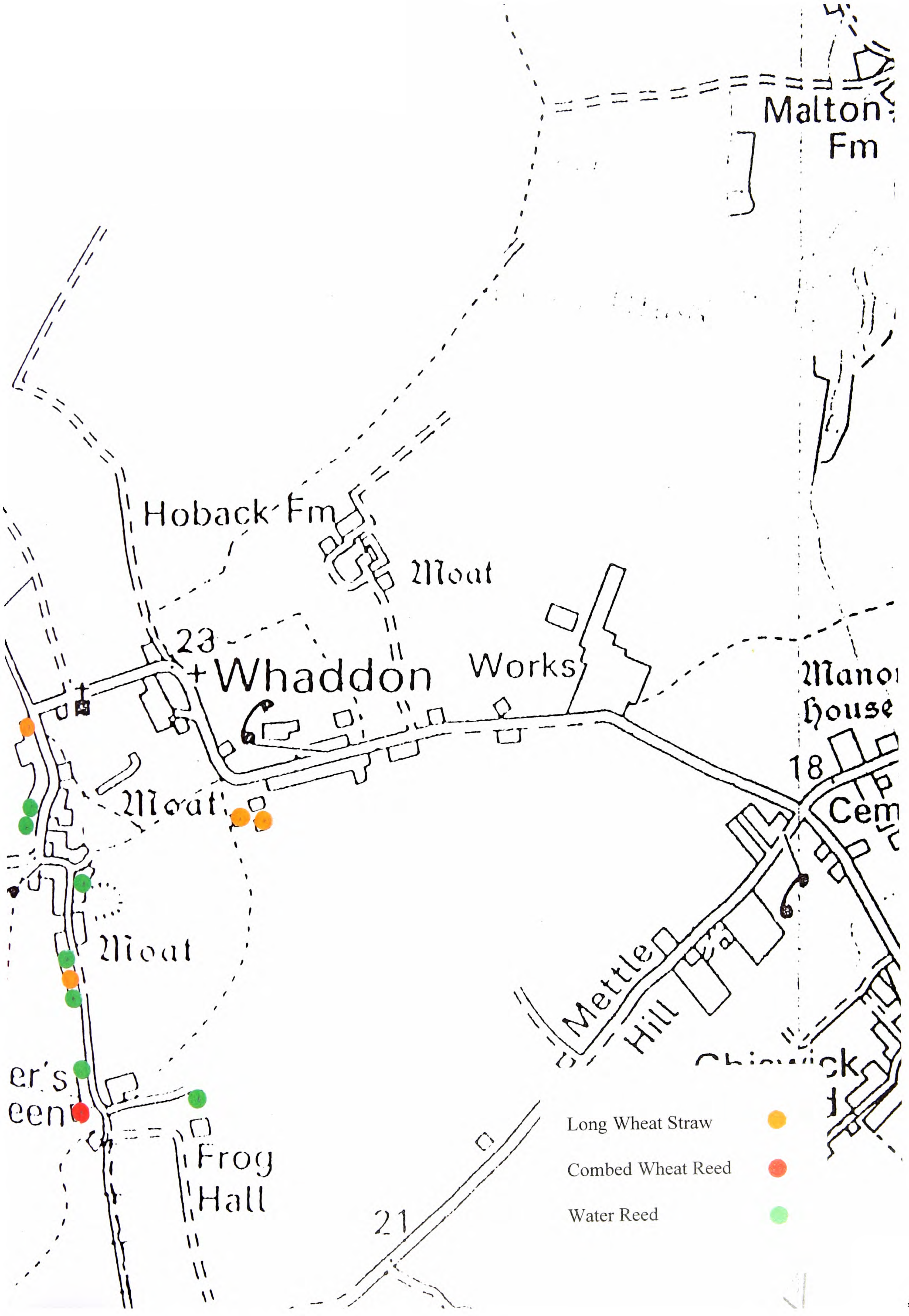

Weston Colville
36%
64%
0%
Long Wheat Straw
Combed Wheat Reed
Water Reed


West Wratting Park
The Common
Mill Ho
Randswood Fm
Rand's Wood
Yen Hall Fm
Moat
Burton End
83
PH
P
West Wickham
101
Chalk Pit
Moat
Hill Fm
Streetly End
Streetly Hall
Over Wood
Hare Wood
PH
P
Horsehea
95
Manor Fm
Inn
Long Wheat Straw
Combed Wheat Reed
Water Reed

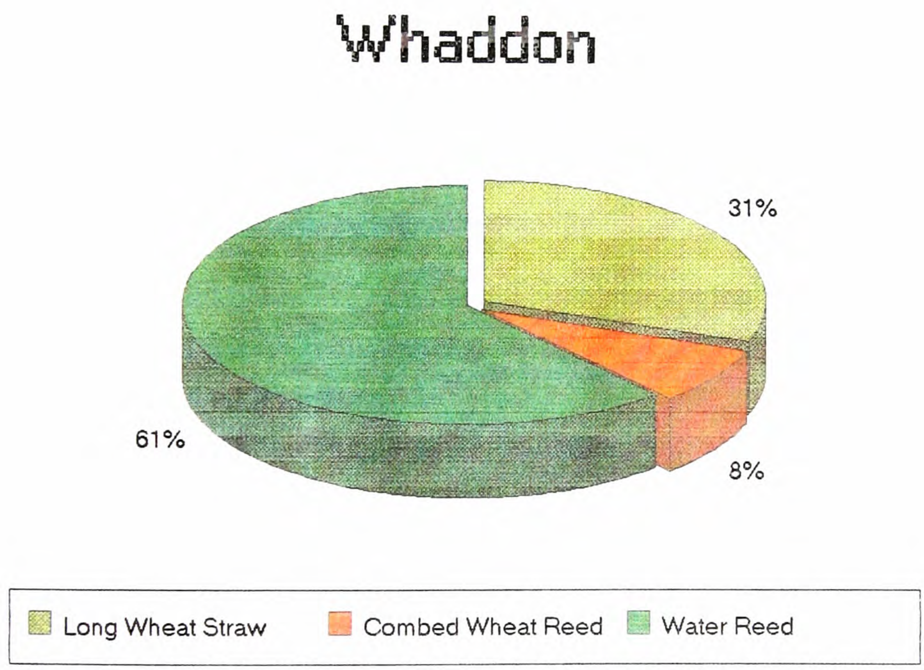

West Wickham
46%
50%
4%
Long Wheat Straw
Combed Wheat Reed
Water Reed

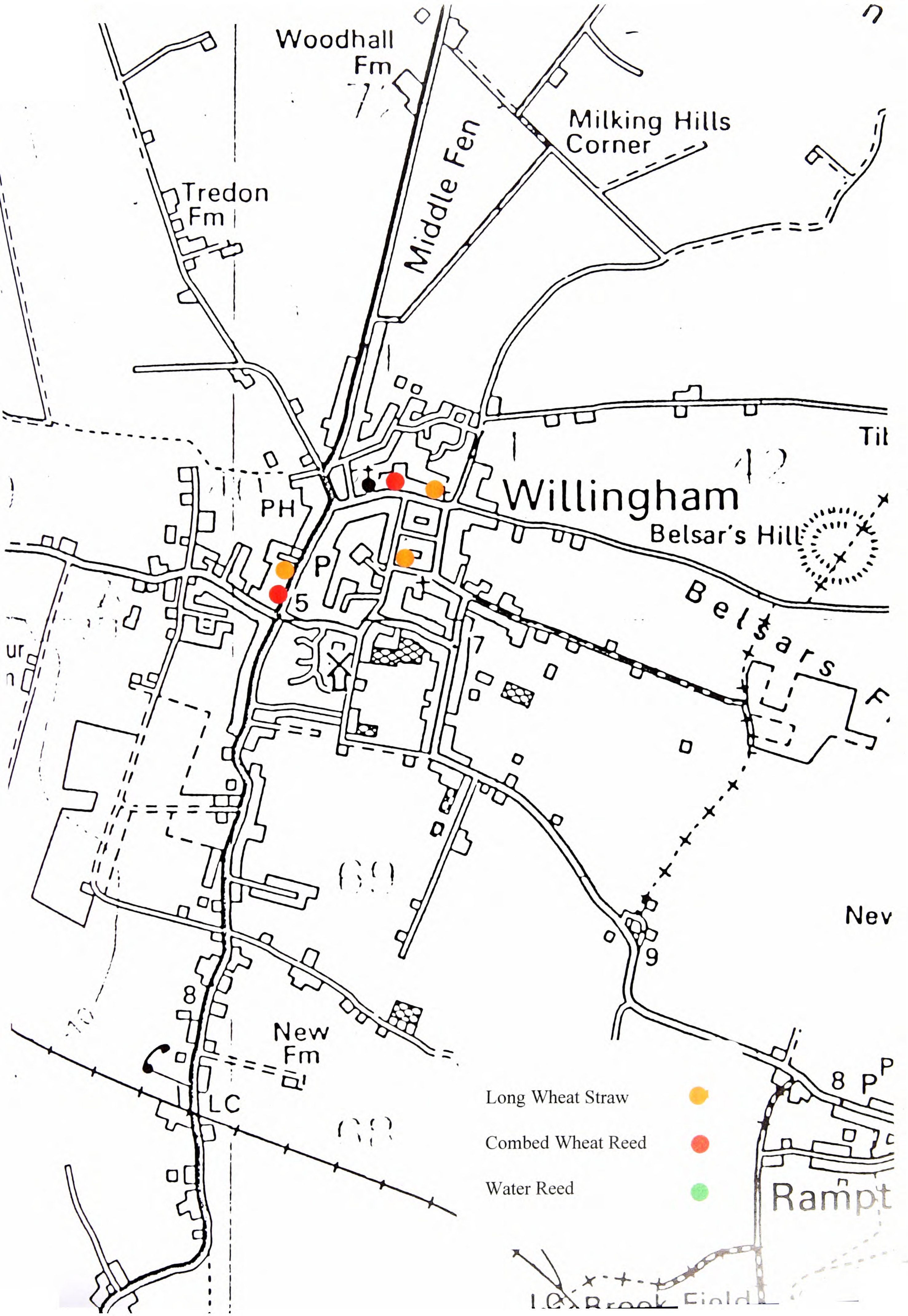

Weston
Colville
Hall Fm
Hall
West
Wratting
P
PH
Moat
119
West Wratting
Park
Mill
Ho
Yen Hall Fm
Moat
Long Wheat Straw
Combed Wheat Reed
Water Reed

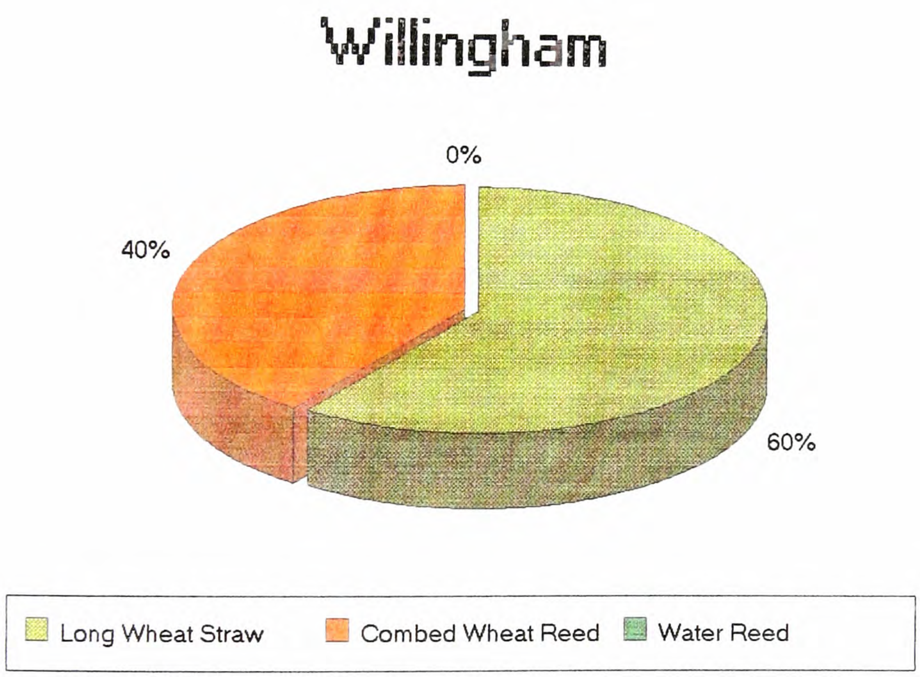

West Wratting
38%
62%
0%
Long Wheat Straw
Combed Wheat Reed
Water Reed



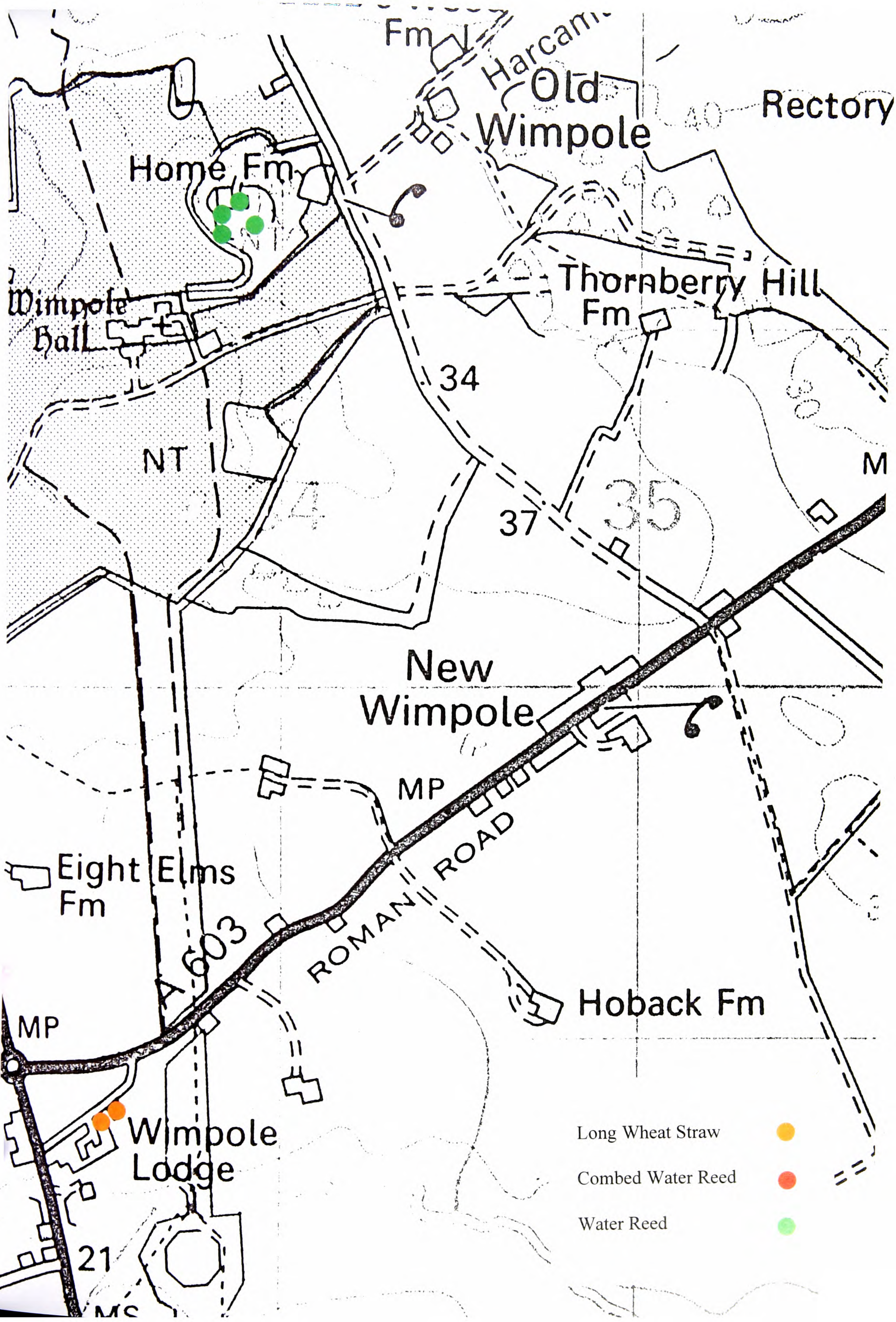
Malton Fm
Hoback Fm
Moat
23
Whaddon
Works
Manor House
18
Cem
Moat
Moat
Mettle Hill
Chiswick
er's
een
Frog Hall
21
Long Wheat Straw
Combed Wheat Reed
Water Reed

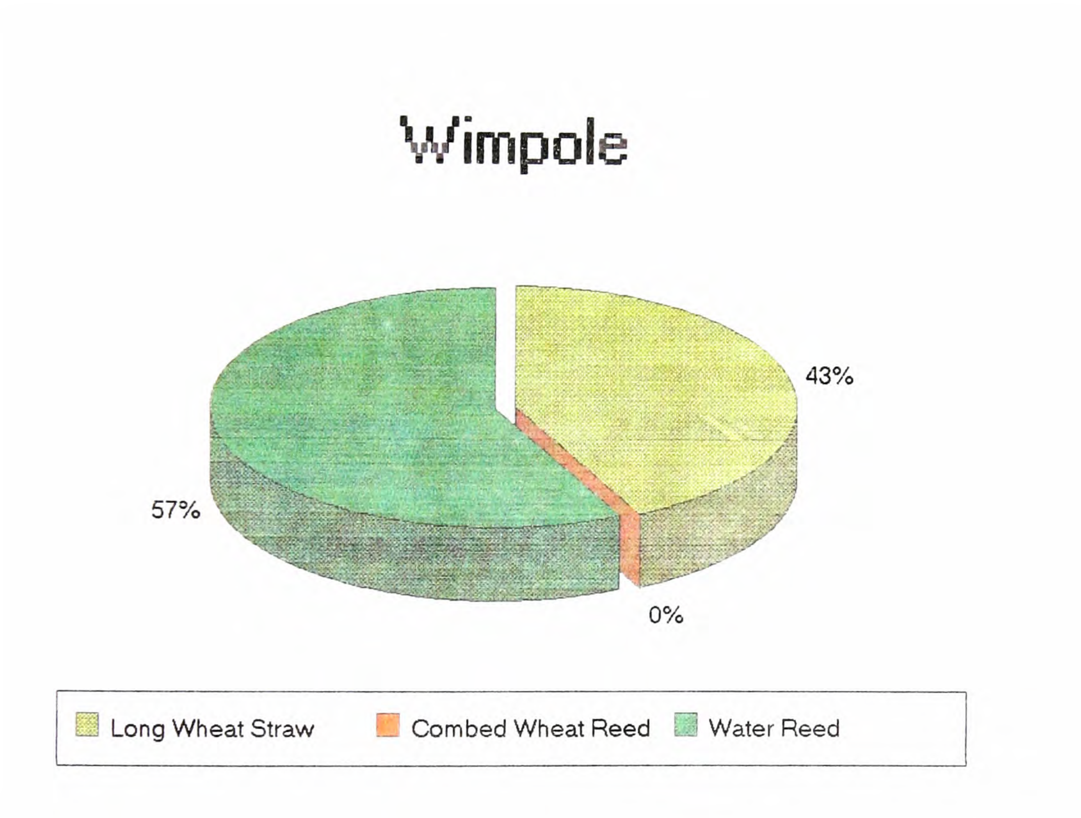

Whaddon
31%
61%
8%
Long Wheat Straw
Combed Wheat Reed
Water Reed


Woodhall Fm
Milking Hills Corner
Middle Fen
Tredon Fm
Willingham
Belsar's Hill
PH
P
5
7
8
9
New Fm
LC
8 P
Long Wheat Straw
Combed Wheat Reed
Water Reed



Willingham
0%
40%
60%
Long Wheat Straw
Combed Wheat Reed
Water Reed

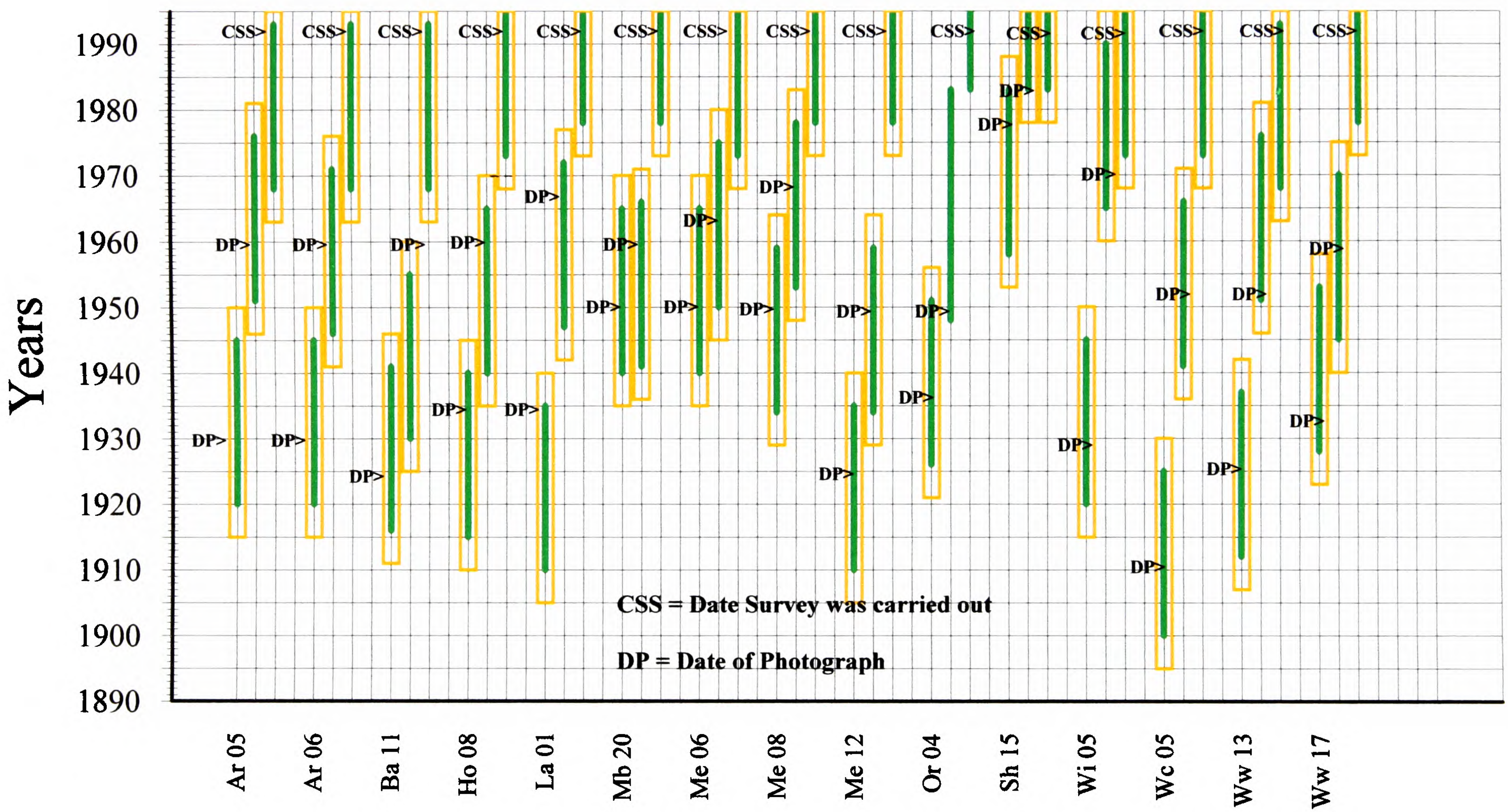

Fm
Harcamlow
Old Wimpole
Rectory
40
Home Fm
Wimpole Hall
Thornberry Hill Fm
34
NT
M
37
35
New Wimpole
MP
Eight Elms Fm
ROMAN ROAD
A 603
Hoback Fm
MP
Wimpole Lodge
21
MS
Long Wheat Straw
Combed Water Reed
Water Reed


Wimpole
43%
57%
0%
Long Wheat Straw
Combed Wheat Reed
Water Reed

Appendix B

The Life Span of Thatch

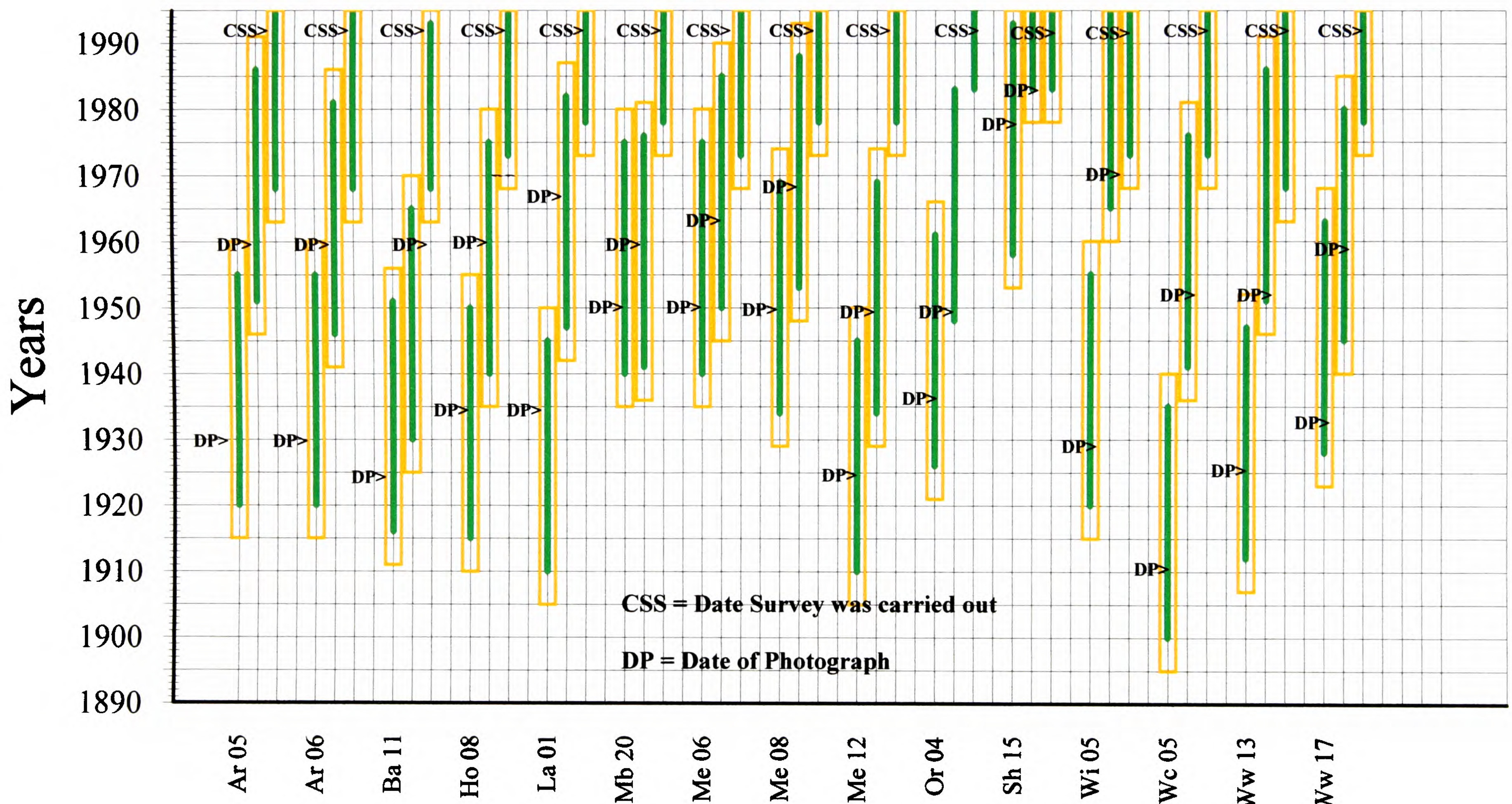
Graph showing max & min life spans of Thatch weathering coats



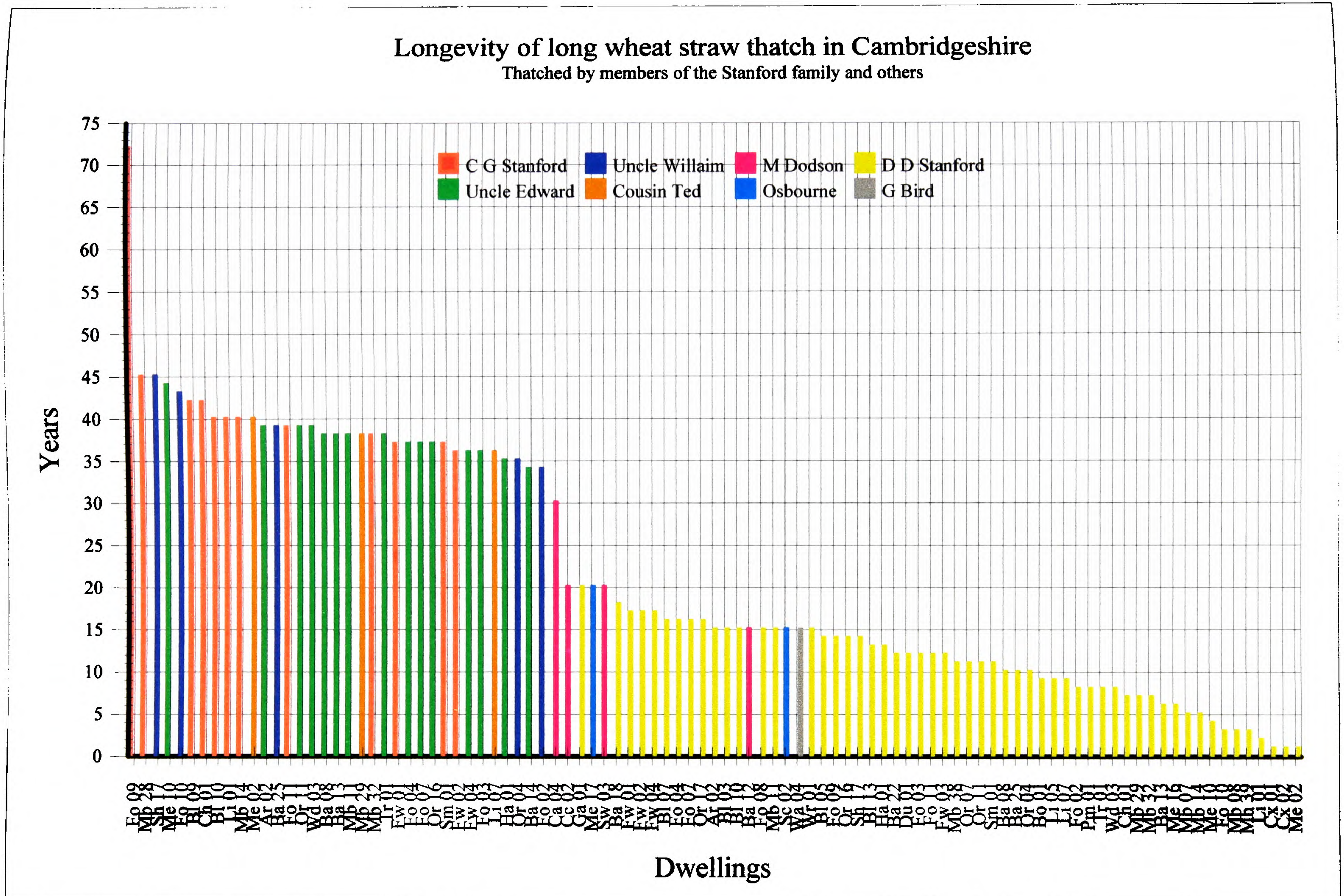
Individual Dwellings based on 25-35 year period

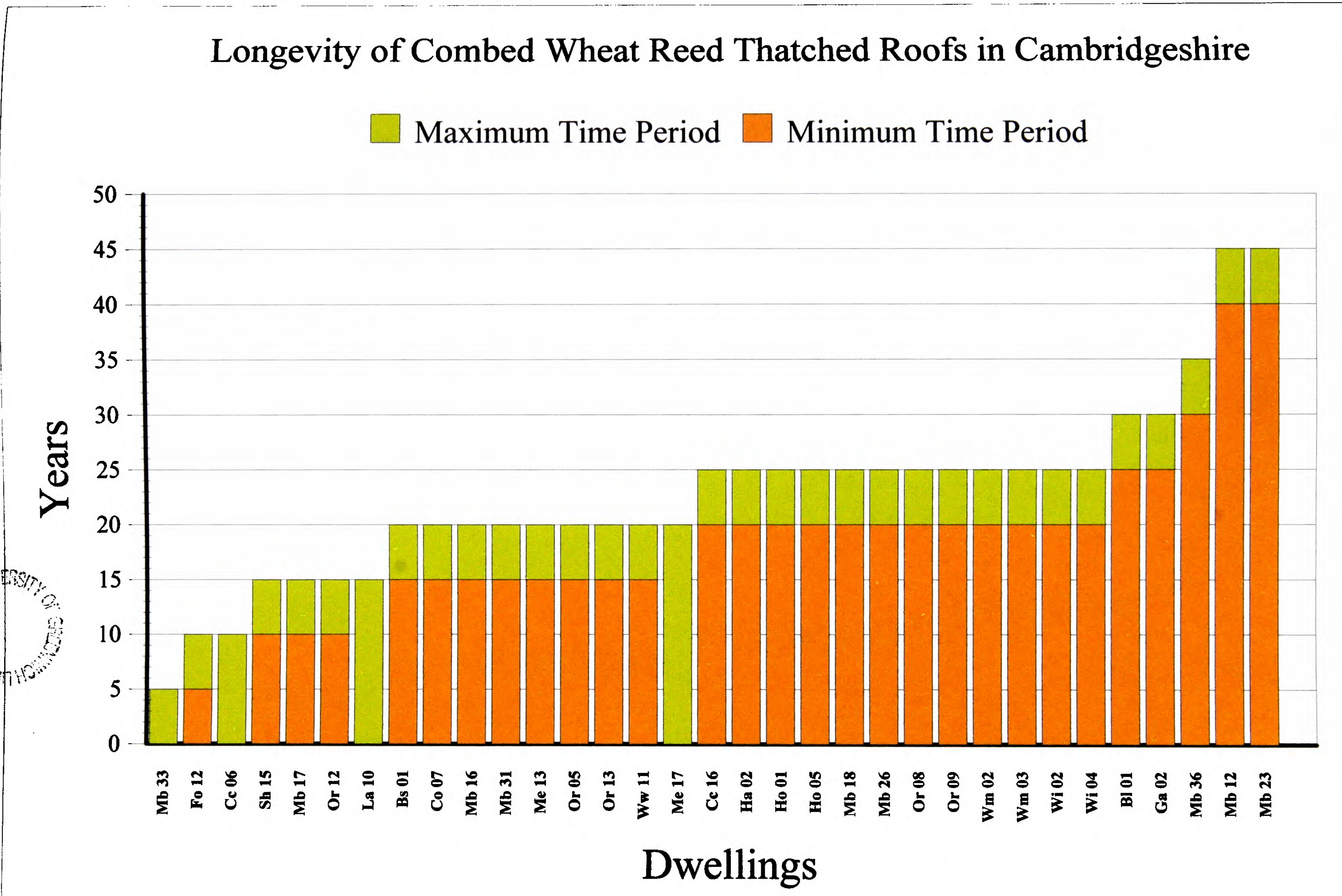
The Life Span of Thatch

Graph showing max & min life spans of Thatch weathering coats

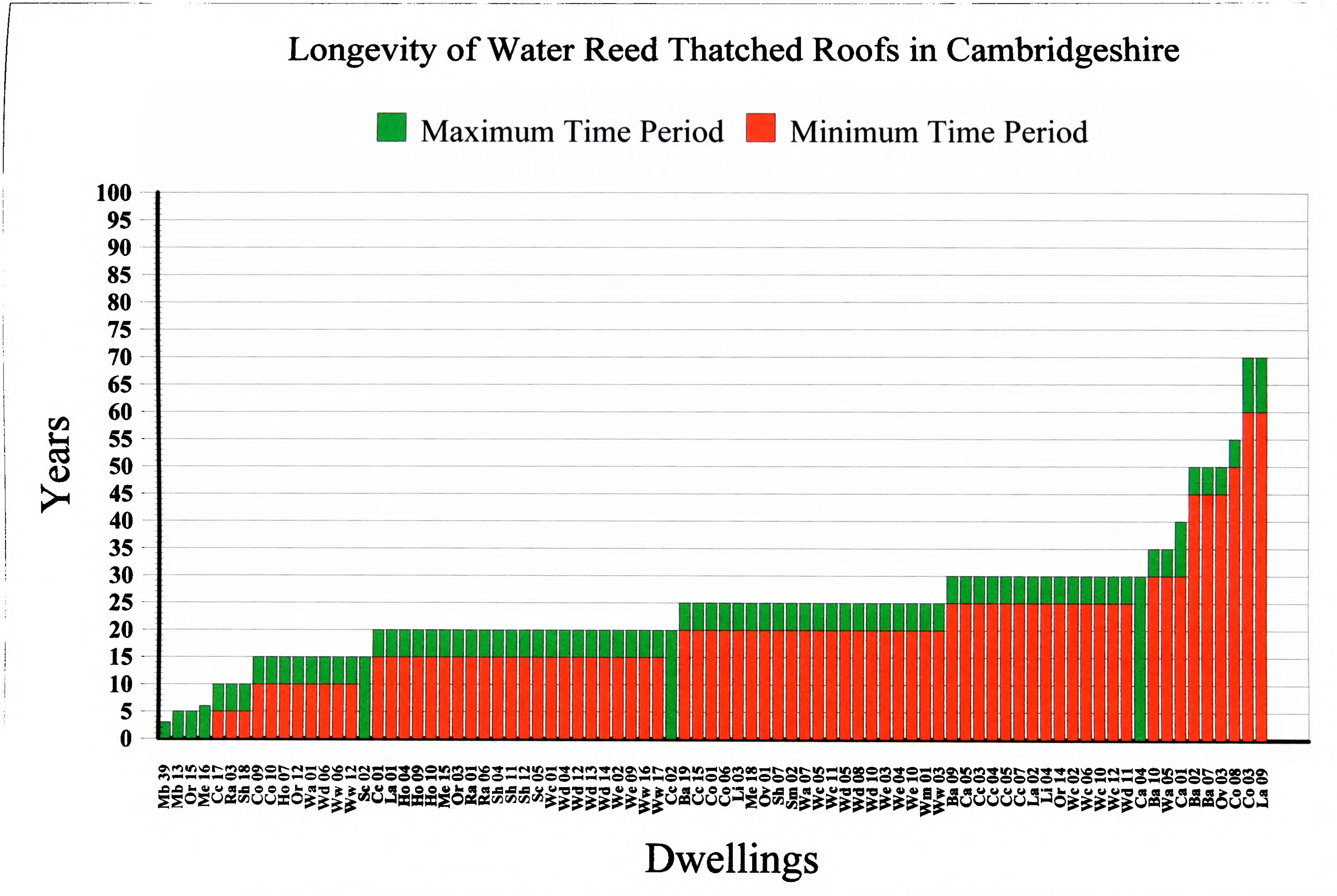


Individual Dwellings based on 35-45 year period

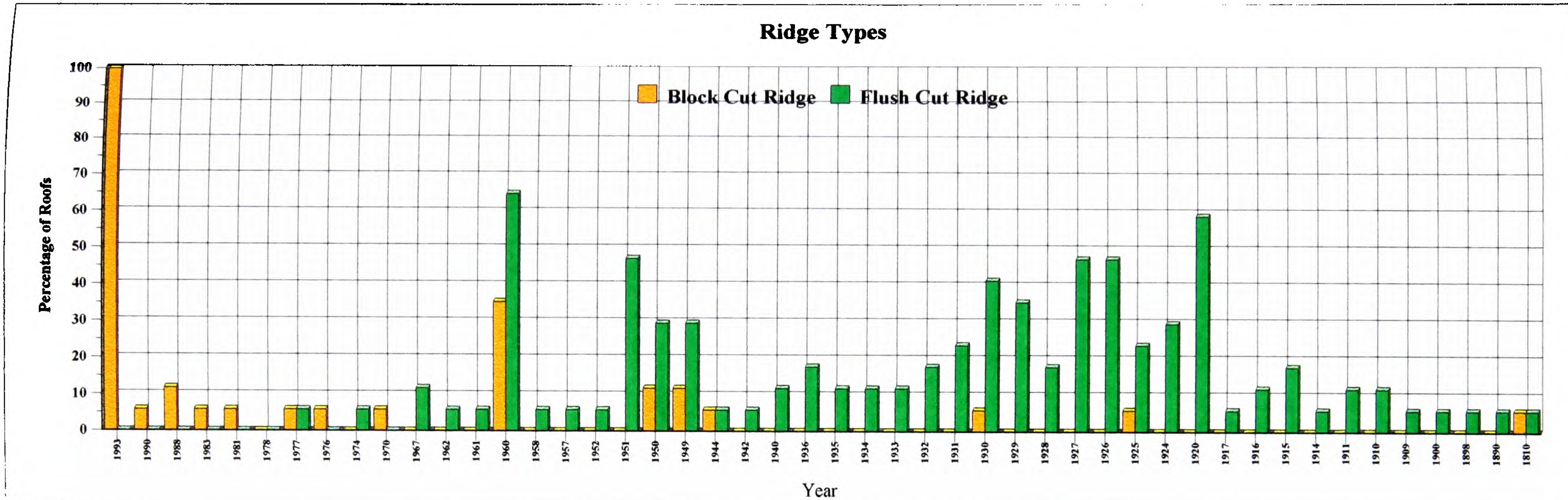

Longevity of long wheat straw thatch in Cambridgeshire
Thatched by members of the Stanford family and others
C G Stanford
Uncle Edward
Uncle Willaim
Cousin Ted
M Dodson
Osbourne
D D Stanford
G Bird
Years
Dwellings
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75

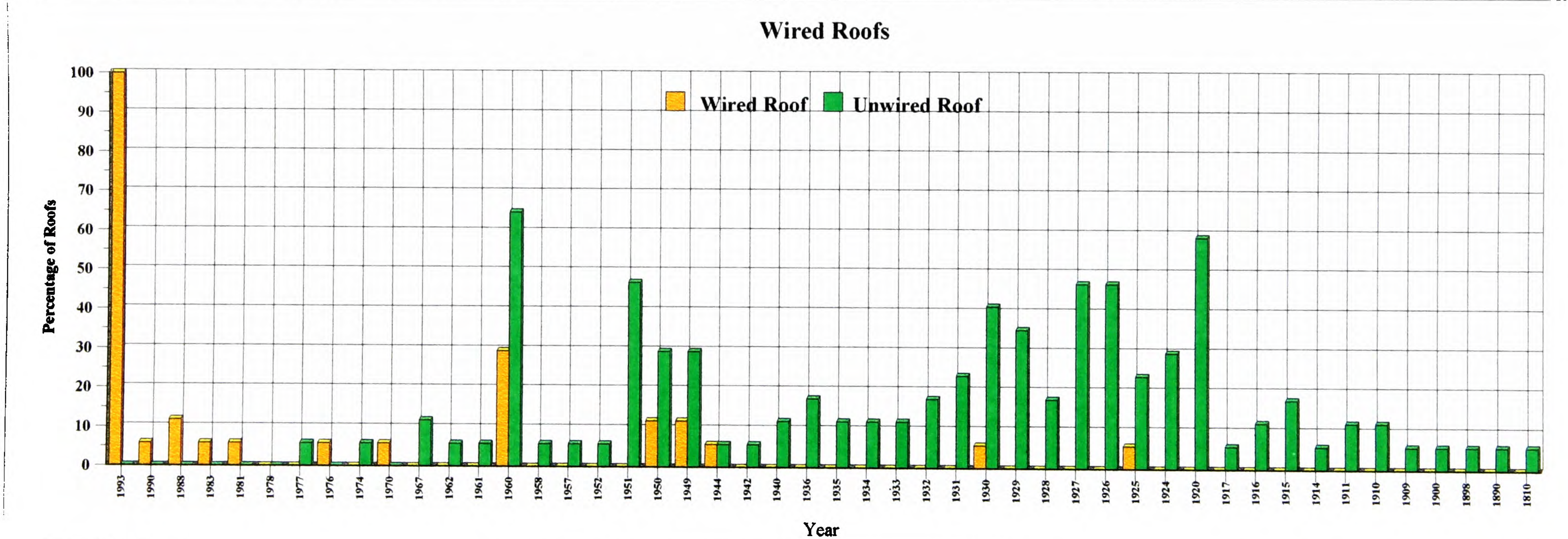


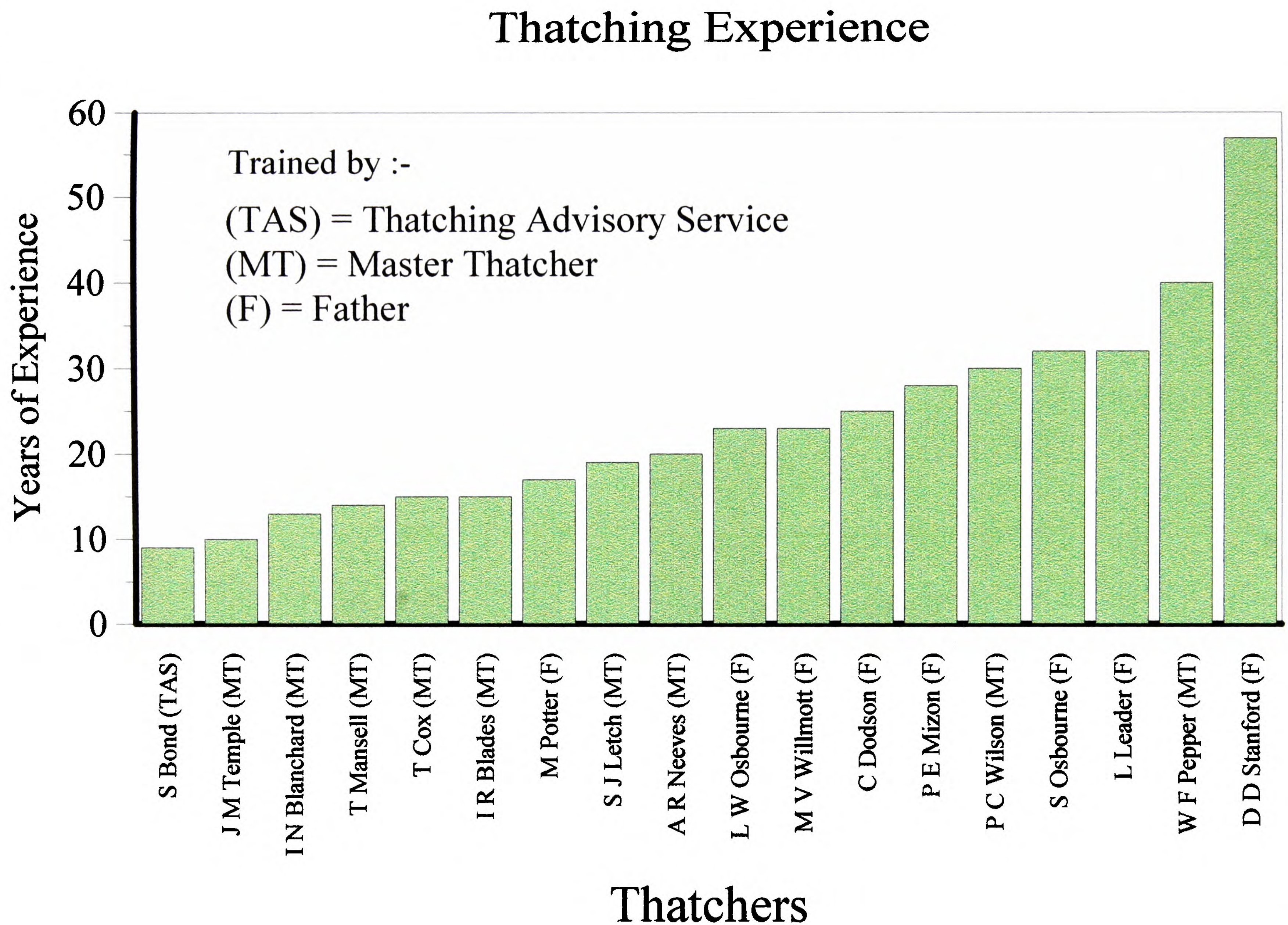
Longevity of Combed Wheat Reed Thatched Roofs in Cambridgeshire
Maximum Time Period
Minimum Time Period
Years
50
45
40
35
30
25
20
15
10
5
0
Mb 33
Fo 12
Cc 06
Sh 15
Mb 17
Or 12
La 10
Bs 01
Co 07
Mb 16
Mb 31
Me 13
Or 05
Or 13
Ww 11
Me 17
Cc 16
Ha 02
Ho 01
Ho 05
Mb 18
Mb 26
Or 08
Or 09
Wm 02
Wm 03
Wi 02
Wi 04
Bl 01
Ga 02
Mb 36
Mb 12
Mb 23
Dwellings



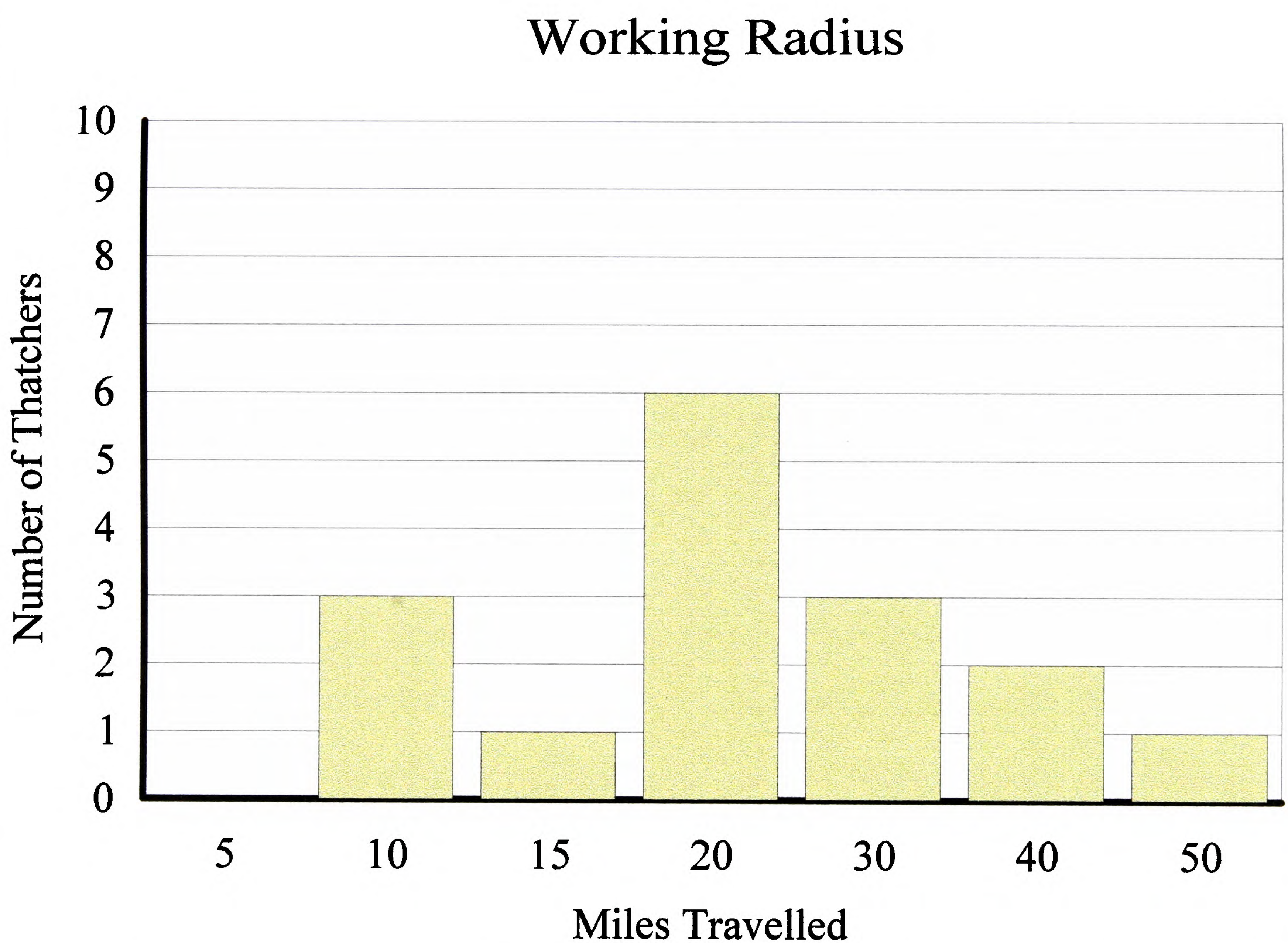
Longevity of Water Reed Thatched Roofs in Cambridgeshire
Maximum Time Period
Minimum Time Period
Years
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Mb 39
Mb 13
Or 15
Me 16
Cc 17
Ra 03
Sh 18
Co 09
Co 10
Ho 07
Or 12
Wa 01
Wd 06
Ww 06
Ww 12
Sc 02
Cc 01
La 01
Ho 04
Ho 09
Ho 10
Me 15
Or 03
Ra 01
Ra 06
Sh 04
Sh 11
Sh 12
Sc 05
Wc 01
Wd 04
Wd 12
Wd 13
Wd 14
We 02
We 09
Ww 16
Ww 17
Cc 02
Ba 19
Cc 15
Co 01
Co 06
Li 03
Me 18
Ov 01
Sh 07
Sm 02
Wa 07
Wc 05
Wc 11
Wd 05
Wd 08
Wd 10
We 03
We 04
We 10
Wm 01
Ww 03
Ba 09
Ca 05
Cc 03
Cc 04
Cc 05
Cc 07
La 02
Li 04
Or 14
Wc 02
Wc 06
Wc 10
Wc 12
Wd 11
Ca 04
Ba 10
Wa 05
Ca 01
Ba 02
Ba 07
Ov 03
Co 08
Co 03
La 09
Dwellings


Ridge Types
Block Cut Ridge
Flush Cut Ridge
Percentage of Roofs
100
90
80
70
60
50
40
30
20
10
0
1993
1990
1988
1983
1981
1978
1977
1976
1974
1970
1967
1962
1961
1960
1958
1957
1952
1951
1950
1949
1944
1942
1940
1936
1935
1934
1933
1932
1931
1930
1929
1928
1927
1926
1925
1924
1920
1917
1916
1915
1914
1911
1910
1909
1900
1898
1890
1810
Year


Wired Roofs
Wired Roof
Unwired Roof
Percentage of Roofs
100
90
80
70
60
50
40
30
20
10
0
1993
1990
1988
1983
1981
1978
1977
1976
1974
1970
1967
1962
1961
1960
1958
1957
1952
1951
1950
1949
1944
1942
1940
1936
1935
1934
1933
1932
1931
1930
1929
1928
1927
1926
1925
1924
1920
1917
1916
1915
1914
1911
1910
1909
1900
1898
1890
1810
Year



Thatching Experience
Trained by :-
(TAS) = Thatching Advisory Service
(MT) = Master Thatcher
(F) = Father
Years of Experience
0
10
20
30
40
50
60
S Bond (TAS)
J M Temple (MT)
I N Blanchard (MT)
T Mansell (MT)
T Cox (MT)
I R Blades (MT)
M Potter (F)
S J Letch (MT)
A R Neeves (MT)
L W Osbourne (F)
M V Willmott (F)
C Dodson (F)
P E Mizon (F)
P C Wilson (MT)
S Osbourne (F)
L Leader (F)
W F Pepper (MT)
D D Stanford (F)
Thatchers


Working Radius
Number of Thatchers
10
9
8
7
6
5
4
3
2
1
0
5
10
15
20
30
40
50
Miles Travelled

Appendix C

I.R.Blades Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

15yrs

2/ Who did you train under while learning the craft?

Clive Brown in Somerset and Devon

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

No

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

After completing my apprenticeship I worked on my own for a year and then joined to someone else and we have been working together ever since

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

combed Wheat Reed & Water Reed

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Delivered by supplier to a rented barn & then we cart it ourselves

7/ What is the average Radius approximately in miles that you work from your home base?

10 miles

8/ Do you make your own Spars and Rods or do you buy them?

I buy my spars but make my own rods

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

CWR :- better with the introduction of organic wheat & less nitrogen used in growing process

WR :- very similar however many more varieties available

10/ Have there been any major changes with regard to the type of client requiring your services . over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

No major changes, always been the richer end of the market

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

no changes at all.

I.N.Blanchard Esq Questionnaire

1/ How many years have you been in the Craft of Thatching?

13 years

2/ Who did you train under while learning the craft?

first ted Palfrey - then from afar Kieth Dunthorne

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

No

4/ Are you a sole practitioner .of the Craft of Thatching, if so for how many years?

eleven years on my own, and I'm on my fourth boy.

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

long wheat straw.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

mostly delivered on site.

7/ What is the average Radius approximately in miles that you work from your home base?

15 miles

8/ Do you make your own Spars and Rods or do you buy them?

I cut the wood and then have them split

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

I have noticed that the long straw has become better

10/ Have there been any major changes with regard to the type of client requiring your services. over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

No their has always been a nice mix of peopl from all walks and classes of life.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

No, I have learnt that you never stop learning but as far as new techniques go (apart from the joining of wire together) its all been done before

P.T.O

S.Bond Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

[illegible]

2/ Who did you train under while learning the craft?

[illegible]

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

[illegible]

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

[illegible]

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

[illegible]

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

[illegible]

7/ What is the average Radius approximately in miles that you work from your home base?

8/ Do you make your own Spars and Rods or do you buy them?

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

T.Cox Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

15 YRS.

2/ Who did you train under while learning the craft?

P. WILSON HATFIELD HEATH

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

PEG TILING / SLATING.

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

YES 11 YRS.

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

LONG STRAW / WATER REED.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

DELIVERED BY SUPPLIER

7/ What is the average Radius approximately in miles that you work from your home base?

6-8 MILES.

8/ Do you make your own Spars and Rods or do you buy them?

BUY

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

LONG STRAW IS BETTER.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

NO

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

YES STANDARDS AND SPEC

ARE BETTER.

C.Dodson Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

25 years .

2/ Who did you train under while learning the craft?

FATHER ,

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

NO .

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

15 years .

5/ What principle material do you use, ie Long Wheat Straw, ~~Combed Wheat Reed~~ or Water Reed?

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Own haulage ,

7/ What is the average Radius approximately in miles that you work from your home base?

50 miles

8/ Do you make your own Spars and Rods or do you buy them?

BOTH.

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

LONG STRAW. BETTER.

REED. SMALLER BUNCHES.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

LITTLE CHANGE,

APART FROM LESS POORER PEOPLE.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

NO CHANGE.

RE-NAMING OF NORFOLK REED.

L.Leader Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

32 YEARS

2/ Who did you train under while learning the craft?

MY FARTHER L G LEADER

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

NO

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

18 YEARS

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

70% WHEAT STRAW
30% WATER REED

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

MAINLY DELIVERED BY SUPPLIER

7/ What is the average Radius approximately in miles that you work from your home base?

20 MILES

8/ Do you make your own Spars and Rods or do you buy them?

MAKE SOME BUY SOME

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

STRAW NEW VARIETIES BEING INTRODUCED FROM TIME ~~TO~~ TIME KEEPS QUALITY STABLE.

WATER REED I IMPORT ~~THEM~~. MAINLY FROM AUSTRIA

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

NO MAJOR CHANGES
BUT PEOPLE DO NOT STAY IN ONE PLACE AS LONG AS ONCE DID.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

NONE

IF YOU REQUIRE FURTHER INFORMATION FEEL FREE TO PHONE

CAMBRIDGE 880[2]127

S.J.Letch Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

19 years, the first three years as an apprentice.

2/ Who did you train under while learning the craft?

John Potter of Pebmarsh

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

I worked on a building site for a year as a Stoneman and Scaffolder.

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

Yes I am the sole practitioner at present for 16 years

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

I use Long Wheat Straw and Water reed as the traditional materials of the area, I would never willingly use West Country Combed Wheat Reed.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

I produce and cart my own Long Wheat Straw, with water reed I arrange to cart from the supply.

7/ What is the average Radius approximately in miles that you work from your home base?

30 miles at most but 15 as an average

8/ Do you make your own Spars and Rods or do you buy them?

I make them and buy them.

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Better produced older wheat varieties for long Straw thatching, I have seen hybrid wheat straw thatch coming out of Cambs for larger profits from a certain thatcher.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

Clients tend to be richer, and most come from towns + London.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

The quality of Long straw thatching has improved in East Anglia due mainly to the Herts + East Anglia Master Thatchers Ass.
There are one or two thatchers carrying out their new thatching techniques not for quality's sake but for modern day profits count quick.

48 - Neeves ~~Brothers~~

Questionnaire

1/ How many years have you been in the Craft of Thatching?

20 years

2/ Who did you train under while learning the craft?

Several thatchers starting in Essex moving to Devon and Hampshire and finally in Bedford

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

I have worked in the Building Industry at various intervals over the years

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

yes for ~~[illegible]~~ twelve years. since 1982

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

long straw & water Reed.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Normally Delivered.

7/ What is the average Radius approximately in miles that you work from your home base?

About 20 miles.

8/ Do you make your own Spars and Rods or do you buy them?

I buy in Spars but make my own Rods

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Straw is getting Better. English Reed worse although the Continental Reed is good.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

Yes clients do not seem to be so wealthy as they used to

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

Not in the work itself.

T.Mansell Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching? 14 YEARS

2/ Who did you train under while learning the craft? STUART OSBORN JOHN COUSINS

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching. QUALIFIED CARPENTER ANN JOINER

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

ONE OTHER MAN

5/ What principle material do you use, ie Long Wheat Straw, ~~Combed Wheat Reed~~ or Water Reed?

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

I CUT LONG STRAW & BYE WATER REED & CART

7/ What is the average Radius approximately in miles that you work from your home base?

TEN MILES

8/ ~~Do yo~~u make ~~your~~ own Spars and Rods ~~or do you buy them?~~

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, ~~Combed Wheat Ree~~d or Water Reed.

BETTER QUALITY LONG STRAW AS WE GROW & CUT OUR OWN STRAW WITH A BINDER

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, (People coming in from the towns ?)

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they? NONE

W.E.Mizon Esq

Questionnaire

Mr W.E Mizon (My Father) died 11 years ago.

1/ How many years have you been in the Craft of Thatching?

28 years.

2/ Who did you train under while learning the craft?

My Father

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

Part Time Photography.

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

Working with my Brother for the last 15 years.

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

Long Wheat Straw and Water Reed.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

We farm 25 acres of land solely for long straw.
We buy Water Reed.

7/ What is the average Radius approximately in miles that you work from your home base?

about 40 miles

8/ Do you make your own Spars and Rods or do you buy them?

Both

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Long Wheat Straw has improved since the 60s and 70's
Water Reed not much difference.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

More people coming in from the towns since the 70's

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

Thatching is a craft where there has been very little change.

L.W.Osborne Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

[illegible] years

2/ Who did you train under while learning the craft?

[illegible]
(My Father)

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

[illegible]

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

Long Wheat Straw

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

[illegible]

7/ What is the average Radius approximately in miles that you work from your home base?

20 miles apart

8/ Do you make your own Spars and Rods or do you buy them?

Buy it

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Long [illegible]

[illegible]

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

People coming in from [illegible]

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

[illegible]

Combed Wheat Reed being [illegible] applied [illegible] to look like straw

Introduction of plastic [illegible]

Name Questionnaire

Mr [illegible]

1/ How many years have you been in the Craft of Thatching?

32 Years

2/ Who did you train under while learning the craft?

With my Father.

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

No

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

Yes - But have Employed People over the years Part time help and occasionally.

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

Long Straw but also use Water Reed

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Myself Grow and Cart my own straw.

7/ What is the average Radius approximately in miles that you work from your home base?

30 miles

8/ Do you make your own Spars and Rods or do you buy them?

Yes

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Quality varies but I farm with son Maris Huntsman & Widow. ([illegible])

10/ Have there been any major changes with regard to the type of client requiring your services. over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

Towns coming in to the country buying cottages for retirement,

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

Tieing thatch to rafters in the Dutch method, ie Straw wired to the timber rafters.

W.F. Pepper Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

40 years

2/ Who did you train under while learning the craft?

Dodson Brothers
Thatching

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

No

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

20 years

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

Long Wheat Straw
Water Reed

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Both.

7/ What is the average Radius approximately in miles that you work from your home base?

Within ~~Hour~~ journey Journey
about 6 miles to 10 miles
Could be more

8/ Do you make your own Spars and Rods or do you buy them?

Mostly buy in.

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Water Reed Better
Long straw Better
Combed wheat reed Better

10/ Have there been any major changes with regard to the type of client requiring your services .over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

People coming in from towns

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

None

M.Potter Esq   Questionnaire

1/ How many years have you been in the Craft of Thatching?

17 YEARS

2/ Who did you train under while learning the craft?

MY FATHER, CHARLES POTTER.
(I am the 5th generation in my family)

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

I CURRENTLY RUN ANOTHER BUSINESS IN DISTRIBUTION

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

NO. I HAVE ONE TRAINEE

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

LONG WHEAT STRAW

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

I BUY SOME IN & ALSO HARVEST SOME MYSELF

7/ What is the average Radius approximately in miles that you work from your home base?

GENERALLY 20 MILES, BUT I DO GO FURTHER IF NEED.

8/ Do you make your own Spars and Rods or do you buy them?

BUY SOME, MAKE SOME

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

LONG STRAW - GENERALLY MUCH BETTER THAN WHEN I FIRST STARTED

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

CLIENTS ARE YOUNGER & ALOT FROM LONDON, OWNING WEEKEND COTTAGES OR COMMUTERS

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

YES MANY LONG STRAW ROOFS HAVE BEEN CHANGED TO COMBED WHEAT REED, THUS CHANGING THEIR APPEARANCE. ALSO SOME HARVESTING TECHNIQUES HAVE CHANGED & I

AM NOT SURE FOR THE BEST !

D.D.Stanford Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

Started as a boy, learning the craft from the age of thirteen years fifty seven years ago

2/ Who did you train under while learning the craft?

Was trained by my father as he was by his father records show the craft has been in the family since early 1830.

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

After learning the craft & serving in the forces when returning to Quey street. I went into general building.

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

I've spent the last twenty years of my working life thatching

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

used long wheat straw

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

delivered to site

7/ What is the average Radius approximately in miles that you work from your home base?

Radius about 20 miles

8/ Do you make your own Spars and Rods or do you buy them?

always made my own.

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

Long wheat straw its poorer for the reason its no longer grown with organic manure the life span of a roof is reduced by as much as seven years.

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

Town people with little knowledge of what its about. the story has always been the same no one has ever had any money & they still have no money. experience gives you the answer, Poorer

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

there are very few changes that can be made to the technique of thatching. there's only one way to carry this craft correctly, that is the way it always has been. wheat reed has eased the burden. it saves a lot of ground work. that you have when using long wheat straw it does away with the yelming side of the preparation before it goes onto the roof.

J.M.Temple Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

10 years

2/ Who did you train under while learning the craft?

Colin McGhee, The Thatchers, Finchingfield.

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

Yes

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

Yes, ~~for~~ 4 years

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

Long Straw

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

Cart it myself

7/ What is the average Radius approximately in miles that you work from your home base?

10 miles

8/ Do you make your own Spars and Rods or do you buy them?

I buy them

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

The main change in long straw has been the harvesting of the materials. We now use stripper headers on the combine, to remove the wheat, then swath it and round bale the straw. The old way was to bind the field, stack it and then thresh it with the threshing drum. The straw is of similar quality, but not as easy to use with the new method

10/ Have there been any major changes with regard to the type of client requiring your services .over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

the clients have stayed much the same with a mixture of both people from towns and poorer country folk.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

Thatching techniques have stayed much the same, the main change in this area has been the use of wheat reed which is not traditional to the area and took out of place against the long straw roof.

P.C. Wilson Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

30 YRS

2/ Who did you train under while learning the craft?

W.T. MURPHY - (MASTER THATCHER)

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

NO.

4/ Are you a sole practitioner. of the Craft of Thatching, if so for how many years?

NO

5/ What principle material do you use, ie Long Wheat Straw, ~~Combed Wheat Reed~~ or ~~Water Reed~~?

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

SUPPLY MY OWN.

7/ What is the average Radius approximately in miles that you work from your home base? 30 mls.

8/ Do you make your own Spars and Rods or do you buy them?

Buy them

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

All materials have deteriated in quality

10/ Have there been any major changes with regard to the type of client requiring your services over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

more people coming in from towns

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

No

M.V. Willmott Esq

Questionnaire

1/ How many years have you been in the Craft of Thatching?

23 years

2/ Who did you train under while learning the craft?

J. A. Willmott (my Father) mainly
G. Dunkley. on occasions.

3/ Have you practised any other Craft or taken any other form of employment while practising the Craft of Thatching.

No.

4/ Are you a sole practitioner of the Craft of Thatching, if so for how many years?

Yes 8 years

5/ What principle material do you use, ie Long Wheat Straw, Combed Wheat Reed or Water Reed?

recently Long Straw because of the councils, previously Combed Straw & Norfolk Reed.

6/ Is the material delivered to the site by the supplier, or do you cart it yourself?

I grow & cart it myself.

7/ What is the average Radius approximately in miles that you work from your home base?

1 hrs travelling time (40 miles?)

8/ Do you make your own Spars and Rods or do you buy them?

Buy Spars make rods.

9/ What major changes have you noticed in your career to the various thatching materials you use, ie Poorer, Better different species grown? Please state whether this is for Long Wheat Straw, Combed Wheat Reed or Water Reed.

The materials I use, have improved as I have grown my Straw for the last 14 years. However I am concerned about other Thatchers using Stripper Straw !! as this is not a thatching Material.

10/ Have there been any major changes with regard to the type of client requiring your services .over your career in Thatching ie Richer, Poorer, People coming in from the towns ?

More Bussiness people & more time wasters. ie lots only interested in the price at the bottom of the estimate & not the quality of the materials or job.

11/ Do you feel there have been any major changes in thatching techniques during your career and if so what are they?

Not in thatching techniques but plastic netting started to be used & Hazell spray fizzelled out. More lead flashings now used.

Questionnaire

1. How many roofs on average do you thatch in one year, and how many days on average does this roof take to thatch?

   3

   100 days

2. How many roofs on average could you thatch per year if you could give all your time to the work and enough roofs were available for thatching all year round?

   3

3. Do you thatch all year round, or do you cease work over winter?

   Yes

4. If you do cease work over winter, why?

5. What type of roof thatch lasts longest in your opinion? (i.e. Long Wheat Straw, Combed Wheat Reed or Water Reed.)

   Water Reed

6. Could you give examples to support the above answers in the form of addresses of properties and approximate ages of their thatch?

   The Croft Cutlers Green Thaxted Essex

   70 years

7. What is the longest-lasting roof that you know of in each of the above three materials?

   Long Wheat - 35 years

   Water Reed - 70 years

   Wheat Reed N/A

8. What do you believe are the main causes of deterioration in a thatched roof? (For example, quality of materials, orientation of roof causing excessive damp, excessive sunlight, extreme temperature variation, excessively low roof pitch - below 50 degrees etc.)

Low pitched roofs

9. What do you believe are the main causes of longevity in thatch apart from those that are the opposite of the above answers?

Quality of work

10. Do you obtain your raw thatch material from a specialist supplier, from another thatcher, or do you grow it yourself? Can you give reasons for your choice?

The straw I use is grown by myself so I have control over the material I use

11. Do you have any experience of the various non-traditional training courses, for instance those organised by the RDU or other interested bodies, and, if so, what is your opinion of their value when compared with the traditional training methods of apprenticeship to a master thatcher?

No.

Questionnaire

1. How many roofs on average do you thatch in one year, and how many days on average does this roof take to thatch?

   3 complete re-thatches + 2 or 3 re-ridges/patching

2. How many roofs on average could you thatch per year if you could give all your time to the work and enough roofs were available for thatching all year round?

   3 complete re-thatches + 2 or re-ridges & patching

3. Do you thatch all year round, or do you cease work over winter?

   Thatch all year.

4. If you do cease work over winter, why?

5. What type of roof thatch lasts longest in your opinion? (i.e. Long Wheat Straw, Combed Wheat Reed or Water Reed.)

   Water reed generally. I have known some reed roofs go none off 20 odd years & some straw roofs last 50 years, but not normally.

6. Could you give examples to support the above answers in the form of addresses of properties and approximate ages of their thatch?

   No

7. What is the longest-lasting roof that you know of in each of the above three materials?

   Combed Wheat Reed — Don't Know.

   Long Straw — 37 years +. (due to be rethatched next year)

   Water reed — 42 years +. (Still going very well)

8. What do you believe are the main causes of deterioration in a thatched roof? (For example, quality of materials, orientation of roof causing excessive damp, excessive sunlight, extreme temperature variation, excessively low roof pitch - below 50 degrees etc.)

low pitch, — Features eg windows, extensions
South side always wears the worst - Sun, continued wetting & drying etc

9. What do you believe are the main causes of longevity in thatch apart from those that are the opposite of the above answers?

Experienced craftsmen.

10. Do you obtain your raw thatch material from a specialist supplier, from another thatcher, or do you grow it yourself? Can you give reasons for your choice?

Buy most of my straw from a specialist supplier it is easier, cheaper and I haven't the risk of losing the crop.
I do occasionally grow some myself (8 acres last year). Harvest is a stressful time, I prefer to leave it to some-one else

11. Do you have any experience of the various non-traditional training courses, for instance those organised by the RDU or other interested bodies, and, if so, what is your opinion of their value when compared with the traditional training methods of apprenticeship to a master thatcher?

No experience.

Questionnaire

1. How many roofs on average do you thatch in one year, and how many days on average does this roof take to thatch?

   On average five a year
   A roof of 12 to 15 sq fifty five to sixty five days
   this excludes removing old thatch clearing away & renewing

2. How many roofs on average could you thatch per year if you could give all your time to the work and enough roofs were available for thatching all year round?

   As above taking in consideration changing weather conditions

3. Do you thatch all year round, or do you cease work over winter?

   It depends how harsh the weather is during winter

4. If you do cease work over winter, why?

   The reason for not working through winter is because thatching materials are naturally grown by nature, if used during sharp frosty weather they become brittle & of no use whatever

5. What type of roof thatch lasts longest in your opinion? (i.e. Long Wheat Straw, Combed Wheat Reed or Water Reed.)

   Maximum Water Reed Sixty five years
   Combed Wheat Reed Thirty to forty five years
   Long Wheat Straw twenty five to forty years

6. Could you give examples to support the above answers in the form of addresses of properties and approximate ages of their thatch?

   One Water Reed thatch the Moor Melbourn also Orwell High St
   Combed Wheat Station Road Melbourn also Orwell High St
   Long wheat straw Rose Cottage Dolgetts lane Melbourn thatched by Dad
   your Grandad Lin 1946 this is exceptional

7. What is the longest-lasting roof that you know of in each of the above three materials?

   Water Reed at Orwell to my knowledge its been done fifty six Years
   Combed Wheat Station Road Melbourn roughly forty years
   With the exception of rose Cottage Melbourn
   a house called Wheelrights Barley High St I rethatched
   in 1980 after previously being thatched by Dad &
   myself 43 years before

8. What do you believe are the main causes of deterioration in a thatched roof? (For example, quality of materials, orientation of roof causing excessive damp, excessive sunlight, extreme temperature variation, excessively low roof pitch - below 50 degrees etc.)

Poor quality materials artificial grown excessive damp mainly in valleys a mixture of sun & rain mainly S W side a constant cold temperature on the north side does less damage & prolongs the the life by up to 7 years, its not wise to thatch a roof below 50 degrees unless forced to, only use water reed its a much harder material

9. What do you believe are the main causes of longevity in thatch apart from those that are the opposite of the above answers?

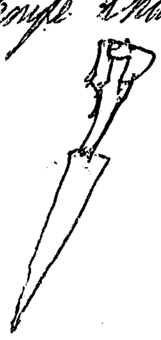
All materials for longevity are best Organic grown
A roof pitch not less than 65 this allows rain, snow & frost a much faster escape where possible don't wire over it gives 7 years extra life span not holding onto frost & snow a good tradesman who packs his materials firmly & secure

10. Do you obtain your raw thatch material from a specialist supplier, from another thatcher, or do you grow it yourself? Can you give reasons for your choice?

We always produced our own materials as stressed organic grown, the heart is when to gather it, two hours can make all the difference its a life long experience as I have expressed there's a heart in everything it comes natural through Life

11. Do you have any experience of the various non-traditional training courses, for instance those organised by the RDU or other interested bodies, and, if so, what is your opinion of their value when compared with the traditional training methods of apprenticeship to a master thatcher?

No I have no experience of these training courses, but some years ago I had two chaps come to me who had to some extent some training through them, when I explained to them how I was taught how to thatch they were amazed they had not been shown that way, Well I said this has been going on for five generations I feel the way I do it, it must be right, they were not able to tell me the difference between a straw knife & a hay knife thats it



Appendix D

F Lowe 3 High St Foxton 1975
* Foley 18 High St Barrington 1976
Salle 32 High St Foxton 1976
Deans Farm Cottage Shepreth
Rd Fowlmere 1976
S Lemm Thatched Cottage
Long Lane Fowlmere 1976
H W Jones Russells Smith
End Barley 1977
* Dr Widdowson Boat Lane
Barrington Extension 1976
Abbot 11-13 Mortimers
Lane Foxton 1977
Ross Wayside Cottage
22 North Brook End Steeple
Morden 1977
Mill Cottage North End
Meldreth 1982
~~[illegible]~~ 29 Ermine Way 21
Arrington → L Hughes 1978

Mrs Galan Farm House Town Green
Road Orwell 1977

4

Mr Lines Whalrights High St
Barley Thatched in 1937
by C G Stanford rethatched in 1978
Son D D Stanford

Miss Gilby 18 Rose Lane
Melbourn 1978

Mr Hanson Poplar Cottage
Pudding Lane Barley 1978

Mr Bonfield 7 Water End
Wrestlingworth 1978

Mr Elliott 35 Town Green
Road Orwell 1979

Mr Blackman 70 Bridge St
Whaddon 1979

Mr Carlisle The Laurels High St
Barley 1980

Mr S Hales Rye Corner Barley 1980

J Aronson Gorse Cottage
Little Eversden 1979

Mr Salmons 18 Station Rd Foxton 1979

Mr Semple 77 Frog End
Museum Cot Shepreth 1979

thatched by Grandad 72 years before
with only two minor repairs C G Stanford
with long wheat straw

Mrs. Greenwood 46 Barton Rd
Haslingfield 1980
Mr Wicken 7 Drury Lane
Melbourn 1981
Mr Hanley Shepreth Cottage
next to School 1981
Mr Barnes Eaden Cottage
High St Fowlmere 1981
Mr Jeffrey 1 Grange Rd Duxford 1981
1 2 3 Mortimers Lane
Foxton 1981
* Hardman 43 High St Barrington 1981
Mr Smith 20 Stocks Lane Orwell 1982
* Mr Brazier 4 Challis Green
Barrington 1982
Lairea Cottage Crawley
End Chrishall 1982
Mr King 26 High St Orwell 1982
No 11 Fishers Lane Orwell 1982
No 5 High St Foxton 1982
Wimpish Manor 1983
* Dr Widdowson Orchard Cottage
Boot Lane 1983

Mr Borgonon North End Meldreth 1984
No 3 Drury Lane Melbourn 1984
Mr Lewis 24 Riddy Lane Bourn 1984
Mrs Williams Thatch Croft
South St Litlington 1984
Mr Cook 14 High St Barrington 1984
No 5?7 Church St Thriplow 1985
No 11 High St Pampisford 1985
Kravick Mobleman's Cottage
Smith End Barley 1986
Cottage on the Green Foxton ~~1990~~ 1990
Mayes New Thatch Rear
No 7 Drury Lane 1990
Tomlin Drury Lane Winter Banks 1988
Mr King 7 Ermine Way Caxton 1992
Mr Webb Dolphin Lane Melbourn 1990
Mr Tittley 8 Ermine Way Caxton 1992
Sinclair Oak Cottage
Wilton Acorn Cottage 1992
South St Litlington
Sapsford 41 White
Croft Rd Meldreth 1993

Rose Cottage Dovegetts Lane
Melbourn Thatched
Ely Stamford 1946
& still good

Mr D Stanford

action for blind people

Dear Christopher Teresa + Babes

Keeping in mind all of these Houses have always been thatched with long wheat straw organic grown. Straw produced this way increasing the life span by up to seven to ten years of a thatched Roof

No 6 Shepreth Road Foxton thatched by Dad 1942
rethatched by me in 1975

No 18 High St Barrington thatched by Uncle Edward 1941
rethatched by me in 1975

Church Farm Cottage Fowlmere thatched by Dad 1940
rethatched by me 1976

No 32 High St Foxton thatched by Uncle Edward 1940
rethatched by me 1976

12-13 Mortimers Lane Foxton thatched by Uncle Edward 1940
rethatched by me 1976

Thatched Cottage Long Lane Fowlmere thatched by Dad 1939
rethatched by me 1979

Cavello Smith End Barley Thatched by Dad 1940
rethatched by me 1980

2 North Brook End Steeple Morden Thatched by Uncle Edward 1945
rethatched by me 1982

7

15 Station Rd Foxton thatched by Dad 1940
rethatched by me 1977

Ermine Way Cottages Barrington thatched by Uncle Edward 1939
rethatched by me 1975

Wheelwrights Barley thatched by Dad 1935
rethatched by me 1975

Rose Lane Melbourn Gilly thatched by Uncle Edward 1940
rethatched by me 1981

Pudding Lane Barley Hanson thatched by Dad 1935
rethatched by me 1975

35 Town Green Rd Orwell thatched by Uncle Edward 1941
rethatched by me 1975

The Laurels High St Barley thatched by Uncle Edward 1943
rethatched by me 1979

Simple Frog End Shepreth thatched by Uncle William 1944
rethatched by me 1979

No 9 Drury Lane Melbourn thatched by Dad 1943
rethatched by me 1987

No 7 Drury Lane thatched by Cousin Ted 1945
rethatched by me 1986

9 High St Foxton thatched by Uncle Edward 1946
rethatched by me 1981

3/

10 Stocks Lane Orwell thatched by Uncle Edward 1943
rethatched by me 1981

7 Challis Green Barrington thatched by Uncle Edward 1945
rethatched by me 1983

Crawley End Chrishall thatched by Dad 1944
rethatched by me 1986

Fishers Lane Orwell Thatched by Uncle William 1948
rethatched by me 1983

No5 High St Foxton thatched by Uncle William 1951
rethatched by me 1985

No9 Boot Lane Barrington thatched by Uncle William 1944
rethatched by me 1983

No3 Drury Lane Melbourn thatched by Dad 1948
rethatched by me 1986

No 14 High St Barrington thatched by Uncle Edward 1949
rethatched by me 1987

32 Bridge St Whaddon thatched by Uncle Edward 1946
rethatched by me 1985

27 Church St Thriplow thatched by Uncle Edward 1947
rethatched by me 1986

Latch Croft South St Litlington thatched by Cousin Ted 1945
rethatched by me 1986

W/

[C]ottage on the Green Foxton thatched by Uncle William 1947
[re]thatched by me 1987

9 North End Meldreth thatched by Uncle Edward 1949
rethatched by me 1984

Oak Cottage South St Litlington thatched by Cousin Ted 1951
rethatched by me 1991

White Croft Road Meldreth thatched by Cousin Ted 1952
rethatched by me 1992

I hope the information I've been able to provide will help in your cause no doubt when you have made a fortune from bleeding my brains you will buy me a toffee apple? go on be a sport

Sincerely hope this finds you all in the best of health & little dumplin is doing fine no doubt she has put on weight, Jonathon I guess is still gaining height, there's but to much to talk about, I had an enjoyable holiday only stayed in one day, Joy Kinsey the coach firms wife is a friend of Delma's she drove us around quite a bit, also Uncle Charlie used to play football with Cyril her husband quite a lot. So all in all everything went fine. Sorry must stop.

Love to you all
God Bless
Dad xx

CASE STUDY - 14 HIGH STREET, BARRINGTON.

Thatched in 1984, the roof was 34 square, (1 square equals 10 square feet in thatching terms) It took eight tons of long wheat straw, the variety of which was called Flanders.

Thirty thousands spars were used to secure the thatch material to the roof structure and it took ten weeks to complete.

The cost of this roof at that time to rethatch was £ 8,400.00

CATALOGUE RAISONNE

This catalogue lists every thatched building within the twenty-four parishes in Cambridgeshire that were surveyed in detail. It also includes a number of other thatched buildings that are included for special reasons, such as they have been found to contain smoke-blackened thatch, or because the record of the date and name of their thatcher (usually a member of the Stanford family) is particularly informative. Each building (or group in the case of a house and outbuilding) is included within a section devoted to a single parish and given a reference that includes an abbreviation for that parish and a number (e.g. Ab 01 is the first building included within the parish of Abington Pigotts, Me 07 the seventh in Meldreth); then comes its name and/or number and street; the National Grid Reference; and a brief description of the building and its structure; this is based on the description given in the statutory lists of buildings of architectural and historic interest, but concentrates on the roof and obstacles such as dormers and chimney-stacks that rise from it. A table describing the thatch follows. This indicates the age of the thatch at the time of the survey (1993) and an estimate of the date of the last re-thatching; this is sometimes replaced by specific information (usually from DDSR); and this information is repeated again for earlier weathering coats using the evidence of photographs and other stated sources. The next rows indicate the form and material of the weathering coat; the type of formation of the ridge and its decoration, if any; followed by the type of underlying base coat, where known, including how many layers exist (eg x2 for two layers); and, finally, whether the roof is wired or not. The estimate of age follows the procedure described in Chapter 2, and this allows an estimate of the period, usually to within five years, when the roof was last re-thatched with a new weathering coat. Occasionally the precise date of the last thatching is known, and this is also stated, together with the name of the thatcher, partly within the table and fully as a concluding Note. The source of this information is either verbal communication (with the thatcher or occupant) or comes from the thatcher's records. Similar sources, where appropriate, are also given of photographic evidence headed by the name of the collection and photograph reference and date.

The survey was begun in 1993 and completed in 1996. The estimated age of the thatch is adjusted as though it were based on the year 1993; thus a roof estimated at 20-25 years old is shown as re-thatched in 1968-73, even though the survey may have taken place in, say, 1995. In practically every case, the buildings have been statutorily listed and are Grade II, following a resurvey undertaken in the early 1980s. The lists provide a fuller description of the building than given here, but do not record details of what type of thatching was employed.

There are seven examples of smoke-blackened thatch given in the main catalogue. As an Addendum, a further twelve examples are listed, taken from nine other parishes (including a few in the neighbouring counties of Hertfordshire and Bedfordshire), making nineteen examples in all.

The following abbreviations are used: BC: block-cut; C: century; CAS: Cambridge Archaeological Society; CC: Cambridge Collection ; CWR: combed wheat reed; D: diamonds; DDSR: D.D. Stanford's records; D&S: diamonds and scallops; FR: flush ridge; LWS: long wheat straw; N: no; NMRC: National Monuments Record Photograph Collection; S: scallops; TW: threshing waste; UD: undecorated; W Coat: weathering coat; WR: water reed; Y: yes

ABINGTON PIGOTTS Ab

Ab 01: Bumble Bee Cottage and Barn, High Street

Grid Ref TL 30694440 & TL 30704442

C17 timber-framed cottage, roughcast render, ground floor and attic, five eyebrow dormer windows, projecting outshuts front and rear. Two C20 stacks.

Ref Ab01	Survey	1993				
Age/date	15-20	1973-78				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The barn is thatched in exactly the same manner and date as the main house. The last thatching was by Dodson Brothers. They used fixing techniques for the long wheat straw more commonly used with combed wheat reed, a stylistic characteristic unique to their work.

Ab 02: Hind Cottage, High Street

Grid Ref TL 30734447

Early C18 timber-framed cottage, plaster render and a painted brick plinth. Ground floor and attic, two eyebrow dormer windows, two rebuilt brick chimney-stacks.

RefAb02	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The cottage once formed part of a row, the rest no longer existing.

Ab 03: Home View Cottage and Home Cottage, High Street

Grid Ref TL 30774455

Late C17 pair of timber-framed cottages, plaster render, ground floor and attic, four eyebrow dormer windows, large red brick chimney stack partly plastered.

Ref Ab03	Survey	1993				
Age/date	5-10	1983-88				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ab 04: Pax Cottage, High Street

Grid Ref TL 30714444

Late C17 timber-framed cottage with plaster render on a painted brick plinth. Ground floor and attic with three casement dormer windows, rear out shut. Internally there are several exposed ceiling beams.

Ref Ab04	Survey	1993	CAS VI6	1929		
Age/date	10-15	1978-83	20-25	1904-09		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Ab 05: Swifts Cottage, High Street

Grid Ref TL 30754451

Formerly a pair built in the late C17 or else an early C18 cottage, timber-framed, roughcast render and a plastered brick plinth, one storey and attic, two eyebrow dormer windows, central red brick chimney-stack penetrates a half-hipped thatched roof.

Ref Ab05	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

ARRINGTON Ar

Ar 01: No 5 Church End

Grid Ref TL 32575042

Late C18 timber-framed cottage, brick plinth and rendered, one storey and attic with two gable dormers, red brick ridge stack.

Ref Ar01	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ar 02: Nos 21, 23, 25, & 27 (White Hall Cottage), Ermine Way

Grid Ref TL 33074933

Row of four late C18 timber-framed cottages, rendered, two storeys, gault brick ridge stacks with red brick end stacks.

Ref Ar02	Survey	1993	DDSR	1939	CAS VI 4	1939
Age/date	15 (+54)	1978	39	1939	0-5	1934-39
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	-					
Wired	Y		N		N	

Note: With the exception of 21 & 27, which were re-thatched in 1978 by master thatcher D D Stanford, the remainder of the roof (not recorded in 1993) is in extremely poor condition and was last re-thatched in 1939 by D D Stanford's uncle master thatcher Edward Stanford. One dormer window is not of conventional construction.

Ar 03: Nos 57 and 59 (Chestnut Cottage), Ermine Way

Grid Ref TL 32924986

Pair of late C17 timber-framed cottages, rendered, ground floor and attic, with a half hipped roof. Extended during the C18 to the west, also with a timber frame. Gault brick ridge stacks, five dormer windows, two thatched gables, three with tiled surrounds.

Ref Ar03	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ar 04: No 86 (Acacia Cottage) & No 88 (Rose Cottage), Ermine Way

Grid Ref TL32895003

Pair of timber-framed cottages, late C17, roughcast rendered, ground floor and attic, gault brick ridge stacks, two gabled dormer windows.

Ref Ar04	Survey	1993	CAS IV 7	1927		
Age/date	10-15	1978-83	5-10	1917-22		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Ar 05: Nos 143, 145, 147, 149, 151, & 153 (Crow End Cottages) Ermine Way

Grid Ref TL 32075060

Row of six C18 cottages, ground floor and attic, six gabled dormers.

Ref Ar05	Survey	1993	NMRC BF 13532	1961	CAS III 1	1930
Age/date	25-30	1963-68	10-15	1946-51	10-15	1915-20
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	UD	BC	UD
Base coat	-					
Wired	Y		Y		N	

Note: The current re-thatch was carried out by master thatcher Malcolm Dodson in the mid to late 1960s (DDSR).

Ar 06: Nos 155 and 157 (Crow End Cottages), Ermine Way, West

Grid Ref TL 32695062

A pair of cottages. No. 155 early C17, timber-framed infilled with clay bats and rendered, of one storey and attic with two eyebrow dormer windows. No. 157 early C19, of one storey with a single stack of gault brick.

Ref Ar06	Survey	1993	NMRC CC69/8	Red Box 1961	CAS III 1	1930
Age/date	25-30	1963-68	15-20	1941-46	10-15	1915-20
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		BC	UD
Base coat	TW					
Wired	Y		N		N	

Note: The current re-thatch was carried out by master thatcher Malcolm Dodson in the mid to late 1960s (DDSR).

BARRINGTON Ba

Ba 01: No 14 Orwell Road

Grid Ref TL 39454971

Late C17 timber-framed cottage with plaster render. Three bays with a lobby entry, ground floor and attic, gable dormer, and a ridge stack. The bay to the north-west has a lower ridge than the remainder, and may have been open to the roof.

Ref Ba01	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ba 02: No. 7 Orwell Road

Grid Ref TL 38724950

Late C16 and early C17 house. The earlier part timber-framed and plaster rendered, of two bays and two storeys, the first floor jettied with exposed joists supported by shaped brackets. No dormers. There is a C19 gault brick stack.

Ref Ba02	Survey	1993	CAS	IV 5 1926		
Age/date	45-50	1943-8	20-25	1901-6		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The 1926 photo shows slippage in the weathering coat.

Ba 03: No 4 West Green

Grid Ref TL 39204969

Late C17 timber-framed cottage with roughcast render, and a C19 gault brick chimney-stack, ground floor and attic with a dormer.

Ref Ba03	Survey	1993				
Age/date	20-25	1968-43				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ba 04: No 6 West Green

Grid Ref TL 39204973

Late C17 timber-framed cottage with roughcast render, and a half-hipped roof with a ridge stack. Three-bay lobby-entry plan, ground floor and attic with two gabled dormers with C19 horizontal sliding sashes.

Ref Ba04	Survey	1993	NMRC RBC 38	1958		
Age/date	10-15	1978-83	10-15	1943-8		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The roof in the photograph of 1958 shows bird damage to the eaves, perhaps partly a consequence of lack of wiring, and general slippage of the weathering coat.

Ba 05: No 44 (Old Webs), West Green

Grid Ref TL 38874953

C17 cottage: a main beam in the ground floor room has the initials RM and date 1657 inscribed. Timber-framed with plaster render. Two bays, a lobby entry, with a narrower storage bay at the north-east end. Ground floor and attic with two gabled dormers. The roof is supported by clasped side purlins.

Ref Ba05	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ba 06: No 48 (West Thatch), West Green

Grid Ref TL 38834951

The cottage can be dated to *c.*1678 from hearth tax receipts for approximately 1678 to 1682 fixed to lintels above the hearths. Timber framed with plaster render. Three bays with a lobby entry, the bay to the west is enlarged at the rear. Ground floor and attic, with modern casement. The main-posts have jowled heads and downward bracing and support a purlin roof, narrowing at the chimney bay, dormer windows.

Ref Ba06	Survey	1993				
Age/date	25-30	1963-68				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ba 07: No 31 (Royal Oak Inn), West Green

Grid Ref TL 38984947

A public house of Wealden form, mid C15, renovated in the C20, with an exposed timber frame and plastered infill. Central two-bay hall, formerly open, with a chamber and solar in the jettied west end, and service rooms in the jettied east end. The hall has been floored over and has coved eaves to the recessed bays. The roof is hipped to the west end and there is a red brick chimney-stack of the C17 with two diagonally set linked shafts.

RefBa07	Survey	1993	CAS 12	1926		
Age/date	45-50	1943-8	20-25	1901-6		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The1926 photo shows slippage in the weathering coat.

Ba 08: Nos 4 & 6 Challis Green

Grid Ref TL 39724982

Early C19 pair of cottages, timber-framed with plaster render. The two individual dwellings share a gault brick ridge stack. Two storeys with two half dormer windows and two C20 windows. The interior has two small hearths and a slender main beam. The cottages are said to have been converted from a barn and apple store.

Ref Ba08	Survey	1993	DDSR	1993		
Age/date	10	1983	38	1945		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last thatched in 1983 by master thatcher D D Stanford, and before this by his uncle, master thatcher Edward Stanford in 1945.

Ba 09: No 10 Challis Green

Grid Ref TL 39754980

Early C19 cottage, renovated and enlarged at the south end in the late C20. The building is mainly timber -framed with plaster render and a C19 grey brick ridge stack. Two storeys, with four C20 casements with leaded lights replacing four C19 horizontal sliding sashes.

Ref Ba09	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ba 10: Barn at Rectory Farm, Haslingfield Road

Grid Ref TL 39735001

Weatherboarded C17 timber-framed barn, with five aisled bays and a half -hipped roof. Arch-braced tie-beams and aisle-ties to the arcade-posts, side purlins to the roof.

Ref Ba10	Survey	1993	CAS IV 14	1926		
Age/date	30-35	1957-63	10-15	1911-16		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Ba 11: Barrington Primary School, Haslingfield Road

Grid Ref TL 39665001

National School and School House dated 1839. Timber framed and roughcast rendered, with two gault brick chimney-stacks. The house has a gable to the road, flanked by school rooms at right angles. Both are of one storey, the house also with an attic.

Ref Ba11	Survey 1993		NMRC 13564 BF 1960		CC 1926 Y13 4995	
Age/date	25-30	1963-8	30-35	1925-30	10-15	1911-16
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat			Y		Y	
Wired	Y		N		N	

Note: The photograph of 1926 shows the valleys lined in lead. There is also evidence of slippage in both photographs.

Ba 12: No 2 High Street

Grid Ref TL 39494983

Late C17 timber-framed cottage with small dairy or pantry extensions. The exterior is rendered, half hipped thatched roof, and a red brick ridge stack. The plan consists of two bays with a lobby entry, which has been extended. Ground floor and attic. C20 extension at the rear.

Ref Ba12	Survey 1993					
Age/date	15	1978				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: Last thatched in 1978 by master thatcher Malcolm Dodson (DDSR).

Ba 13: No 14 High Street, North

Grid Ref TL 39454971

Late C17 timber-framed cottage with roughcast render and a half-hipped roof, C19 gault brick ridge stack. Lobby-entry plan with narrow end bay to the south-west. Ground floor and attic with two dormers.

Ref Ba13	Survey DDSR	1993				
Age/date	6	1987	38	1949		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat						
Wired	Y					

Note: Last thatched by master thatcher D D Stanford in 1987, and before that by his uncle, master thatcher Edward Stanford in 1949 (DDSR).

Ba 14: No 18 High Street

Grid Ref TL 39434970

Once a pair of cottages, now one, early C19, timber-framed, two-storeyed, with a rendered brick plinth and a gault brick end stack. No dormers.

Ref Ba14	Survey DDSR	1993		1993		
Age/date	18	1975	34	1941		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

YNote: The current re-thatch was carried out by master thatcher D D Stanford in 1975, and the one before that by his uncle, master thatcher Edward Stanford in 1941 (DDSR).

Ba 15: No 22 High Street, North

Grid Ref TL 39394968

A pair of cottages, now one, timber-framed with a red brick stack of two flues, one storey and attic with one dormer and three modern casements.

Ref Ba15	Survey	1993					
Age/date	25-30	1963-8					
W Coat	LWS						
Ridge	BC	D&S					
Base coat	TWx2						
Wired	Y						

Ba 16: No 26 High Street

Grid Ref TL 39374968

Late C17 timber-framed cottage cased in C19 painted brickwork. The roof is split into two levels; the bay to the right-hand side perhaps having been raised in the C19. Two bays with a lobby entry, ground floor and attic, with two dormers in the roof.

Ref Ba16	Survey	1993	CAS IV 16	1926			
Age/date	20-25	1968-73	10-15	1911-16			
W Coat	LWS		LWS				
Ridge	BC	D&S	FR				
Base coat							
Wired	Y		N				

Ba 17: No 29 High Street

Grid Ref TL 39574971

Late C18 or early C19 timber-framed cottage with exterior render, two storeys, a small single ridge stack and an end stack.

Ref Ba17	Survey	1993					
Age/date	15-20	1973-8					
W Coat	LWS						
Ridge	BC	D&S					
Base coat							
Wired	Y						

Ba 18: No 61 High Street

Grid Ref TL 39364961

Late C17 timber-framed cottage, rendered, with half -hipped roof, and an original ridge stack of red brick. Ground floor and attic with three dormer windows.

Ref Ba18	Survey	1993	CAS IV 5	1926		
Age/date	25-30	1963-8	20-25	1901-6		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC			
Base coat						
Wired	Y		N			

Note: The 1926 photograph shows slippage of the thatch.

Ba 19: Barn at Bulbeck Mill House

Grid Ref TL 39534945

C18 timber-framed single-aisled barn, weatherboarded externally, with a hipped roof.

Ref Ba19	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ba 20: No 20 High Street

Grid Ref TL 39414969

Originally two C17 timber-framed cottages, with a brick and clunch plinth, and rendered in plaster. Single range with a lobby entry, one storey and attic, with three dormers in the roof, two with gables, and a red brick ridge stack. A bay to the east is probably an addition, also of the C17. The stud work of the original east gable wall was partly renewed when the bay was added.

Ref Ba20	Survey	1993	CAS IV 8	1926		
Age/date	25-30	1963-8	10-15	1911-16		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The cottage is traditionally known as Candlestick Cottage and may have been the local candle makers cottage. The third dormer was added after 1926, since the photo of 1926 only shows two gabled dormers; it also shows slippage of the thatch.

Ba 21: No 9 (The Cottage), Back Lane

Grid Ref TL 39374985

Late C17 timber-framed cottage rendered in plaster. Lobby-entry plan, with three bays, ground floor and attic, with two dormers a red brick ridge stack.

Ref Ba21	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ba 22: No 41 and 43 High Street

Grid Ref TL 39404967

These were originally a pair of charity cottages built in *c.* 1834 by the trustees of the town estate charity, established in C16. Timber-framed with plaster render, ground floor and attic, sharing one chimney-stack.

Ref Ba22	Survey DDSR	1993				
Age/date	12	1981				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Note: last thatched by master thatcher D D Stanford in 1981 (DDSR).

Ba 23: No 12 High Street

Grid Ref TL 39484973

Late C17 timber-framed cottage with external plaster render. The ridge stack has been rebuilt in red brick in the half-hipped roof. Lobby entry, ground floor and attic with a dormer window. At the north end a single-storey addition in brick possibly for a shop is painted and roofed with pantiles.

Ref Ba23	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ba 24: No 36 (The Guildhall), High Street

Grid Ref TL 39304968

Timber-framed cottage dated 1657, with lath and plaster external walls. The chimney-stack is of red brick, with diagonally grouped shafts. The plan takes the form of four bays with a lobby entry. Ground floor and attic with three gabled dormers. Internally there is a main beam in one room inscribed '18th day of February 1657', '1656', and 'WM 1712'.

Ref Ba24	Survey	1993	CC Ybar K24 1065	1924		
Age/date	20-25	1968-73	15-20	1904-09		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat						
Wired	Y		N			

Note: The 1924 photograph shows slippage of the thatch.

Ba 25: No 9 (Orchard Cottage), Boot Lane

Grid Ref TL 39614951

C19 timber-framed cottage extended during the C20, which included the insertion of two dormer windows to the rear roof void. It has a half-hipped roof to the west end and grey brick chimney-stack to the east end. The main building consists of two bays with a lean-to extension on the north side clad with pantiles.

Ref Ba25	DDSR	1993		1993		
Age/date	10	1983	39	1944		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last thatched by master thatcher D D Stanford in 1983, and before this by his uncle, master thatcher William Stanford in 1944.

Ba 26: No 24 Foxton Road

Grid Ref TL 39924969

C18 timber-framed cottage with external render of plaster. There is a grey brick, single-flue, end stack. Single range with two bays and lobby entry. There is a narrower and possibility later storage bay to the east end. Ground floor and attic, with a dormer and two horizontal sliding sashes.

Ref Ba26	Survey	1993	NMRC BF 13581	1960		
Age/date	20-25	1968-73	0-5	1955-60		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The 1960 photograph shows slippage of the thatch

Ba 27: No 31 and 33 High Street

Grid Ref TL 39564970

Early C19 timber-framed cottages with external plaster render. There is a shared grey brick ridge stack. The plan takes the form of four bays , extended in the late C20 by one bay to the south-west. Two storeys with four small casements at first floor. No 33 has a shared drip-mould to original doorway and a boarded door. The doorway to No 31 has been blocked, but it retains the drip-mould.

Ref Ba27	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

BARLEY (Hertfordshire) Bl

Bl 01: Aidwyke Cottage, Smith End

Grid Ref TL 39903810

C17 timber-framed cottage, sand and cement render, with a L-shaped plan, which has had some C19 century alterations, ground floor and attic with three dormers, and a central ridge stack, partly rendered.

Ref Bl 01	Survey	1993				
Age/date	25-30	1963-8				
W Coat	CWR					
Ridge	BC	D				
Base coat	-					
Wired	Y					

Bl 02: Nobles Cottage, Smith End

Grid Ref TL 39903811

Circa 1370, timber-framed house, rendered, with a lobby-entry plan. A small amount of timber weatherboarding also present. One eyebrow dormer, together with a central red brick chimney stack.

Ref Bl 02	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Bl 03: Wheelwrights, High Street

Grid Ref TL 39913880

Mid C17 timber-framed, part rendered and part boarded. There is a red brick axial ridge stack. No dormer windows.

Ref Bl 03	Survey DDSR	1993	DDSR	1993		
Age/date	15	1978	43	1935		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx3					
Wired	Y		Y			

Note: The current thatching was carried out by master thatcher D D Stanford in 1978, and before that by his father master thatcher C G Stanford in 1935 (DDSR).

Bl 04: The Founds, High Street

Grid Ref TL 39903891

C17 timber-framed cottage clad with a cement and sand render. There is a brick gable stack, also rendered.

Ref Bl 04	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	F					
Base coat	-					
Wired	Y					

Bl 05: The Laurels, High Street

Grid Ref TL 39913831

C17 timber-framed cottage, part rendered and part boarded. There is a red brick axial chimney stack.

Ref Bl 05	DDSR	1993	DDSR	1993		
Age/date	14	1979	36	1943		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y		Y			

Note: Last thatched by master thatcher D D Stanford in 1979, and before that by his uncle master thatcher Edward Stanford in 1943 (DDSR).

Bl 06: The Old Post Office, High Street

Grid Ref TL 39903841

Late C17 timber-framed cottage clad with a cement and sand render, the majority of which is pargeted, normal around Saffron Walden, but unusual here. There is a red brick axial chimney stack.

Ref Bl 06	Survey	1993				
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: This was formerly thatched by D.D. Stanford, date unrecorded (DDSR).

Bl 07 Ravello Rose, Smith End

Grid Ref TL 40113750

C16 timber-framed cottage, with pebble dashed render. Large main range with a smaller wing. There are two brick axial chimney stacks and several dormer windows.

Ref Bl 07	Survey DDSR 1993		DDSR 1993			
Age/date	16	1977	37	1940		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx3					
Wired	Y		Y			

Note: The current thatching was carried out in 1977 by master thatcher D D Stanford, and before that by his father master thatcher C G Stanford in 1940 (DDSR).

Bl 08: Maplemans Cottage, Smith End

Grid Ref TL 40103771

C17 timber-framed cottage with plaster render. Small range with a lobby entry, brick chimney-stack on one gable.

Ref Bl 08	DDSR 1993					
Age/date	7	1986				
W Coat	LWS					
Ridge	BC	D				
Base coat	TW					
Wired	Y					

Note: Rethatched in 1986 by master thatcher D D Stanford.

Bl 09: Bye Corner, Pudding Lane

Grid Ref TL 40103811

Late C17 timber-framed cottage with plaster render painted white. Long range with a short wing perpendicular to it. There is an end stack and an axial ridge stack on the large range. There is also a low outshut at one end of the large range.

Ref Bl 09	Survey 1993 DDSR		DDSR 1993			
Age/date	13	1980	42	1938		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TW					
Wired	Y		Y			

Note: Last thatched by master thatcher D D Stanford in 1980, and before that by his father master thatcher C G Stanford in 1938 (DDSR).

Bl 10: Poplar Cottage, Pudding Lane

Grid Ref TL 40103821

C17 timber-framed cottAge/date clad with plaster render. Three bays. The attic storey contains one eyebrow window. There is an axial ridge stack, together with a one eyebrow window.

Ref Bl 10	Survey 1993 DDSR		DDSR 1993			
Age/date	15	1978	40	1938		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last thatched by master thatcher D D Stanford in 1978, and before that by his father master thatcher C G Stanford in 1938 (DDSR).

BOURN Bo

Bo 01: No 24 Riddy Lane

Grid Ref TL 32305655

Timber-framed, late C17 cottage, with plaster render. There is a half hipped roof with a central ridge stack.

Ref Bo01	Survey DDSR	1993				
Age/date	9	1984				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW & Nettlesx3					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher D D Stanford in 1984.

BASSINGBOURN-CUM-KNEESWORTH Bs

Bs 01: No 15 (Church Cottages), North End

Grid Ref TL 33014402

Probably C15 house, with C17 and C19 alterations and additions, timber-framed, two-storeyed, with a red brick ridge stack and end stack to the west. Three bays with an open hall of one bay remodelled in the early C17, by the insertion of a floor. There was also a brick and timber-framed chimney constructed at this time. Late C17 extensions to the east gable and C19 brick end stack were added to the west. The interior has a substantial part of the original timber frame exposed with two four-centred arched door heads, one in situ.

Ref Bs01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	LWS BC	D&S				
Base coat	-					
Wired	Y					

Bs 02: Nos 10 and 12 (and attached barn), Old North Road

Grid Ref TL 34444459

Cottage and attached barn constructed during the C17 with later alterations, timber-framed and partly plastered and partly weatherboarded. Two storeys and attic with two dormer windows and a ridge stack, and a single-storeyed wing.

Ref Bs02	Survey	1993	CAS III 9	1934		
Age/date	25-30	1963-8	10-15	1919-24		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The 1934 photograph shows damage to the roof probably owing to lack of wire netting and attack by birds.

Bs 03: Garden Feature, Nos 10 and 12, Old North Road

Grid Ref TL 33064401

Timber-framed garden house erected in the mid C19, octagonal, clad with vertical weatherboarding.

Ref Bs03	Survey	1993				
Age/date	30-40	1953-63				
W Coat	Heather					
Ridge	BC	D&S				
Base coat	Broom					
Wired	Y					

Bs 04: Frog Hall, Bridge Street, Whaddon

Grid Ref TL 35294541

C16 timber-framed house, rendered in plaster, with C20 cross wing, ground floor and attic with four eyebrow dormer windows and chimney-stack rebuilt in the C20. The house is situated outside the south-east angle of a large moated site.

Ref Bs04	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Bs 05: No 74 High Street (The Hoops Public House)

Grid Ref TL 33594400

Public house built during the C17 with C18 and C19 additions and alterations, timber-framed, with a painted plinth and weatherboarded, ground floor and attic, the roof partly thatched and partly tiled, with two red brick ridge stacks and a rear stack. The original range is to the north with a two-storey addition to the south, the main elevation of the building is the west.

Ref Bs05	Survey 1993					
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Bs 06: No 10 South End (The Old Black Bull), West Street

Grid Ref TL 33144384

The building is now used as a house but was formally an inn, constructed during the late C17 with alterations later, timber-framed and rendered externally with plaster, of two storeys, red brick end stacks to the gable ends. The right-hand side of the roof is clad in plain tiles, the remainder in thatch.

Ref Bs06	Survey 1993		CAS 1911 VII 10			
Age/date	10-15	1978-83	10-15	1896-1901		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The present thatch was carried out by the firm of master thatchers Dodson Brothers who characteristically use a fixing method for LWS more appropriate to CWR (see Ab 01); the 1911 photograph shows slippage in the thatch.

CARLTON-CUM-WILLINGHAM Ca

Ca 01: Cornwall Cottage, Willingham Green

Grid Ref TL 62595415

Originally a row of C17 cottages, but now one dwelling, timber-framed and rendered, ground floor and attic, with three gable dormers, brick end stack.

Ref Ca01	Survey	1993	CAS II 1	1945		
Age/date	30-40	1953-63	15-20	1925-30		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ca 02: No 14 Brinkley Road (Kingfisher Cottage)

Grid Ref TL 64015358

C18 timber-framed cottage with plaster render, ground storey and attic, extended during the C20. The brick ridge stack is painted.

Ref Ca02	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Ca 03: Nos 4 & 6 Willingham Green

Grid Ref TL 62695378

C18 timber-framed cottage with exterior render, formerly a public house extended during the C20, ground floor and attic, with two gabled dormers.

Ref Ca03	Survey	1993	CAS III 7	1930		
Age/date	15-20	1973-8	10-15	1915-20		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The roof shows signs of extensive damage caused by birds.

Ca 04: Park Cottage, Carlton Green Road

Grid Ref TL 64365345

C18 timber-framed cottage with plaster render, ground floor and attic with dormers.

Ref Ca04	Survey	1993	CAS III 9	1951		
Age/date	30	1963	10-15	1936-41		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The last thatching was carried out by master thatcher Malcolm Dodson in 1963 (DDSR). The 1951 photograph shows slippage of the thatch.

Ca 05: Walnut Tree Cottage, Church Road

Grid Ref TL 64125308

C18 timber-framed cottage with plaster render, ground floor and attic, with dormers.

Ref Ca05	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ca 06: Nos 173 & 174 Acre Road

Grid Ref TL 64475273

Pair of C18 timber-framed cottages with plaster render, ground floor and attic, with dormers.

Ref Ca06	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

CASTLE CAMPS Cc

Cc 01: Wisteria Cottage, Bartlow Road

Grid Ref TL 63504330

Late C17 timber-framed cottage with external render, a lean-to extension to the rear, and a central brick ridge stack.

Ref Cc01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 02: Spindle Beam Cottages, The Endway, Camps End

Grid Ref TL 61404240

C18 pair of timber-framed cottages with exterior render, now one dwelling, ground floor and attic, with two tiled gabled dormers, and a red brick ridge stack.

Ref Cc02	Survey	1993				
Age/date	20	1973				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: An unusual block-cut pattern of diamonds and scallops stretches horizontally across the roof half way down, the work of master thatcher Malcolm Dodson who undertook the last re-thatch in 1973 (DDSR).

Cc 03: Old Thatch, Church Lane

Grid Ref TL 62954317

Pair of C18 timber-framed cottages with exterior render, now one dwelling, with three tiled gable dormers in the roof, and a brick ridge stack in the central bay.

Ref Cc03	Survey	1993	CC Ycas K6 11200	1960		
Age/date	25-30	1963-8	15-20	1940-45		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Cc 04: Goodwoods Cottage, Church Lane

Grid Ref TL 62954317

Pair of C18 timber-framed cottages with exterior render, now one dwelling, with two eyebrow dormers in the roof, and a brick ridge stack.

Ref Cc04	Survey	1993	CC Ycas K6 11200	1960		
Age/date	25-30	1963-8	20-25	1935-40		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Cc 05: Owls Hoot Cottage, Haverhill Road

Grid Ref TL 63174380

Late C17 timber-framed cottage with plaster render, only two of three bays remaining, ground floor and attic, with a dormer window on its east side, later brick stack.

Ref Cc05	Survey 1993		CC 1960 Ycas K6 11201			
Age/date	25-30	1963-8	10-15	1945-50		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		N			

Cc 06: Cottage North of the Manse, High Street

Grid Ref TL 63274330

Mid C19 timber-framed cottage with exterior roughcast, panel over the front door dated 1836, ground floor and attic with three dormers, and a ridge stack and an end stack.

Ref Cc06	Survey 1993		CAS IV 1 1961			
Age/date	10	1983	15-20	1941-6		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: date of last re-thatching given as 1983, name of thatcher unknown.

Cc 07: Elizabeth Cottage, High Street

Grid Ref TL 62954317

C18 timber-framed cottages, partly plastered and partly weatherboarded, ground floor and attic, with three eyebrow dormer windows, and a brick ridge stack of two building periods.

Ref Cc07	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc08: No 1 (Meadow Cottages), High Street

Grid Ref TL 63274339

Originally a row of C18 timber-framed cottages, now a pair with No 3, exterior render of plaster, ground floor and attic, with a dormer, and a brick ridge stack for each cottage.

Ref Cc08	Survey	1993	CAS III 4	1924		
Age/date	25-30	1963-8	0-5	1919-24		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Cc 09: No 3 (Meadow Cottages), High Street

Grid Ref TL 63274339

Originally a row of C18 timber framed cottages, now a pair with No. 1, exterior render of plaster, ground floor and attic, with a dormer and a brick ridge stack.

Ref Cc09	Survey	1993	CAS III 4	1924		
Age/date	25-30	1963-8	15-20	1904-09		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Cc 10: Wayside House, High Street

Grid Ref TL 63264363

A timber-framed cottage dated *c.*1614 with an external plaster render to the majority of the building with the exception of one gable that has been clad with modern pargeting, ground floor and attic with three dormers in the south side and a ridge stack which has been rebuilt in recent times.

Ref Cc10	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 11: The Cottage, High Street

Grid Ref TL 63344356

Timber-framed cottage constructed during the C17, with some applied timber framing and external render, ground floor and attic, with three tiled gabled dormers.

Ref Cc11	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 12: Sangsters Farmhouse, The Endway, Camps End

Grid Ref TL 61434250

C18 timber-framed cottage with an exterior render of plaster, ground floor and attic, and a red brick ridge stack.

Ref Cc12	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 13: Charlwood Farmhouse, The Endway, Camps End

Grid Ref TL 62054140

C17 timber-framed cottage with exterior render, ground and first floor, with a brick ridge stack, entrance to the building now at the rear.

Ref Cc13	Survey	1993	CAS IV 9	1932		
Age/date	25-30	1963-8	20-25	1907-12		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Cc 14: The Forge, High Street

Grid Ref TL 63314351

Timber-framed cottage with extensive renovations, ground floor and attic, with two gabled dormers, and a ridge stack which appears to be original.

Ref Cc14	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 15: Building adjacent to The Forge, High Street

Grid Ref TL 63324351

Timber-framed building adjacent to Forge Cottage and built in the same manner as the cottage, although possibly slightly earlier in date.

Ref Cc15	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 16: Potash Cottage (now Willow Beech), High Street

Grid Ref TL 63314352

Late C18 timber-framed cottage with exterior render, ground floor and attic, with one dormer and a brick ridge stack.

Ref Cc16	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Cc 17: P.O. and Hand Post Cottage, High Street

Grid Ref TL 63234346

Timber-framed cottage with external render, divided into two parts, one part forming the local Post Office, the other originally forming the house of the post mistress or post master. There has been extensive renovation. Ground floor and attic.

Ref Cc17	Survey	1993				
Age/date	5-10	1983-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

CHRISHALL (Hertfordshire) Ch

Ch 01: Fairlea Cottage, Crawley End

Grid Ref TL 44804011

C17 timber-framed cottage, with sand and cement render. Single range, ground floor and attic, with a central ridge stack, partly rendered.

Ref Ch 01	DDSR	1993				
Age/date	7	1986	42	1944		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx3					
Wired	Y					

Note: The last thatching was done by master thatcher D D Stanford in 1986, and before that during the Second World War by his father master thatcher C G Stanford in 1944. No wire was used at this time due to the material shortages, however, a wire mesh was applied at a later date.

COTTENHAM Co

Co 01: No 120 (Pond Farmhouse), High Street

Grid Ref TL 45196806

Late C17 timber-framed house, of two storeys, plastered and with soft red bricks for the gables and possibly part of the front wall, ridge stacks rebuilt in gault brick.

Ref Co01	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The thatch has been re-ridged in the last 10 years.

Co 02: No 337 High Street,

Grid Ref TL 44866708

Late C17 timber-framed cottage, part weatherboarded and part plaster rendered, three bays with a lobby entry, two storeys.

Ref Co02	Survey	1993	CAS III 5	1930		
Age/date	10-15	1978-83	10-15	1915-20		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Co 03: No 1 (Fitzwilliam Cottage), High Street

Grid Ref TL 45506868

Late C17 or early C18 cottage with ground floor and attic, C20 extension to the rear, of soft red brick with a local yellow gault brick to the front elevation. Two bays with an end stack at either end. Two dormer windows to the attic.

Ref Co03	Survey	1993	CAS III 5	1898		
Age/date	60-70	1923-33	10-15	1883-88		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	ND		
Base coat	-					
Wired	Y		N			

Co 04: No 82 (White Cottage), High Street

Grid Ref TL 45286826

C18 timber-framed cottage extended at the rear, with roughcast render, including the original ridge stack. Two rooms flanking a lobby entry. Ground floor and attic.

Ref Co04	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 05: No 60 (Olde Thatch), Denmark Road

Grid Ref TL 45336747

C 17 timber-framed cottage with roughcast render on a brick plinth. The original ridge stack in the main range is constructed of gault brick. The plan consists of a hall range with a lobby entry, and a cross wing to the right-hand side. Ground floor and attic.

Ref Co05	Survey	1993				
Age/date	5-10	1983-8				
W Coat	LW S					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 06: No 41 High Street

Grid Ref TL 45376840

Late C17 timber-framed cottage with plaster render. Extensive renovations were carried out during 1980. Typical lobby-entry layout, with a ground floor and attic, with two dormer windows, and a gault brick chimney-stack.

Ref Co06	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 07: No 13 High Street

Grid Ref TL 45456855

Mid C17 timber-framed cottage, with early C18 narrow gault brick casing in English bond with red brick details and quoins. There is some applied framing to the gable ends. The roof is part thatched and part tiled, with an original ridge stack. Three bays with a lobby entry. Ground floor and attic with two dormers.

Ref Co07	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 08: 26 (Mulberry Cottage), High Street

Grid Ref TL 45316767

Late C17 pair of timber-framed cottages, now one dwelling, with a render of plaster and a C19 gault brick coving to the front wall. Ground floor and attic. The roof is steeply pitched and was clad with corrugated iron, but is now reed thatched, axial gault brick ridge stack. Two doorways, one of which is now blocked up.

Ref Co08	Survey	1993	CAS III 5	1932		
Age/date	50-55	1938-43	10-15	1917-22		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Co 09: No 332 (Yeoman Cottage), High Street

Grid Ref TL 44636719

Late C17 timber-framed cottage with plaster render. Typical lobby-entry layout, with a ground floor and attic, with dormer windows, and a gault brick chimney-stack.

Ref Co09	Survey	1993				
Age/date	10-15	1978-83				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 10: No 41 Denmark Road

Grid Ref TL 45196732

Late C17 timber-framed cottage with plaster render. Typical lobby-entry layout, with a ground floor and attic with dormer windows, a gault brick chimney stack.

Ref Co10	Survey	1993				
Age/date	10-15	1978-83				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Co 11: No 36 (Stone Corner Cottage), Cottenham Road, Histon

Grid Ref TL 43656419

C14 timber-framed hall-house, plastered, with two-bay hall, now floored over with an inserted red brick chimney stack, two-storeyed end bays, hipped crown-post roof.

Ref Co11	Survey	1993	NMRC Red Box Histon Photo B	1967		
Age/date	10-15	1978-83	5-10	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		N			

Note: The base layer in the left-hand bay of the hall is ancient and smoke-blackened; the right-hand bay which would have contained a greater degree of smoke-blackening in the past was disturbed when the chimney stack was inserted and there is now very little smoke-blackening apparent here.

CAXTON Cx

Cx 01: No 7 Ermine Street

Grid Ref TL 30415816

Roughcast rendered timber-framed cottage *c.* C17 with early C20 extension. There is a C20 red brick ridge stack, and a further C17end stack to the left hand side. There are two dormer windows inserted into the roof with plain tile aprons.

Ref Cx01	Survey DDSR	1993				
Age/date	1	1992				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher D D Stanford in 1992.

Cx 02: No 8 Ermine Street

Grid Ref TL 30415816

Roughcast rendered timber-framed cottage *c.* C17. There is a red brick ridge stack, and a further end stack to the left hand side. There are two dormer windows inserted into the roof with plain tile aprons.

Ref Cx02	Survey DDSR	1993				
Age/date	1	1992				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher D D Stanford in 1992.

DUXFORD Du

Du 01: Nos 1 and 3 Grange Road

Grid Ref TL 47674570

Timber-framed cottage built during the late C17 orginally as three cottages, but now only two. Two ridge stacks together with three gabled dormer windows.

Ref Du01	DDSR	1993				
Age/date	12	1981				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The present thatch was laid by master thatcher D D Stanford in 1981.

FOXTON Fo

Fo 01: No 1 High Street

Grid Ref TL 40744806

Originally a *c.* 1550 timber-framed cottage with plaster render, built for John Fuller, rebuilt in *c.* 1720 and widened at the north west end side in the late C18. There is a diagonally set ridge stack of red brick. The roof has a half hip to the west end.

Ref Fo01	Survey	1993				
Age/date	15-20	1973-78				
W Coat	LWS					
Ridge	BC					
Base coat	TWx2					
Wired	Y					

Fo 02: No 5 (Carshalton Cottage) High Street

Grid Ref TL 40774807

Originally built in 1586 for Richard Dunnidge. A timber-framed cottage with plaster render, rebuilt during the C17. There is a red brick chimney-stack at right angles to the ridge.

Ref Fo02	Survey	1993	DDSR			
Age/date	8	1985	34	1951		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y		Y			

Note: Last re-thatched by D D Stanford in 1985, and before that by his uncle William Stanford in 1951 (DDSR).

Fo 03: No 29 (Michaelhouse) High Street

Grid Ref TL 40954822

A pair of timber-framed cottages with plaster render built in 1575. Remodelled and rebuilt in the early C18. Two original axial ridge stacks, with a third added at a later date (R. Parker, *The common stream*)

Ref Fo03	Survey	1993	DDSR			
Age/date	12	1981	36	1945		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: Last thatched by master thatcher D D Stanford in 1981, and before that by his uncle Edward Stanford 1n 1945 (DDSR).

Fo 04: No 32 and 34 High Street

Grid Ref TL 41054828

Timber-framed cottage with plaster render built in 1560 for William Alleyn, enlarged in C17 at the north end. There is a ridge stack consisting of four shafts on a square base. (R. Parker, *The common stream*)

Ref Fo04	Survey	1993	DDSR			
Age/date	16	1977	37	1940		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	-					
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1947, and before that by his uncle Edward Stanford in 1940 (DDSR).

Fo 05: Nos 44 and 46 High Street

Grid Ref TL 41134832

Timber-framed cottage with plaster render built in 1637 for Richard Rayner. There is a diagonally set chimney stack with grouped shafts. The cottage was subdivided probably in the late C18 or early C19. (R. Parker, *The common stream.*)

Ref Fo05	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Fo 06: No 22 Station Road

Grid Ref TL 40964842

Cottage built in 1570 for John Rayner. Timber-framed with plaster render, brick ridge stack. (R. Parker, *The common stream*)

Ref Fo06	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Fo 07: No 11 Mortimers Lane

Grid Ref TL 41434847

The ground floor of this timber framed cottage originates from the 1620s. The roof was raised and the first floor added in 1928. Single ridge stack. (R. Parker, *The common stream*)

Ref Fo07	Survey	1993	DDSR			
Age/date	16	1977	37	1940		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y		N			

Note: The last re-thatch was carried out by D D Stanford in 1977, and before that by his uncle Edward Stanford in 1940 (DDSR).

Fo 08: No 61 (Pound Hill) High Street

Grid Ref TL 41204840

Timber-framed cottage with a plaster render, built in 1581 for William Breastbone. The cottage was extended by one bay to the west at a slightly later date. The building originally consisted of one storey and an attic, this was open to the roof with the floor being inserted during the C17. There is a red brick ridge stack with a single flue. (R. Parker, *The common stream*)

Ref Fo08	Survey	1993				
Age/date	15	1978				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher Malcolm Dodson in 1978 (DDSR).

Fo 09: No 18 Station Road

Grid Ref TL 40984839

Cottage built in 1582 for Thomas Wells. Timber-framed with a roughcast render. The is a half hipped roof with a rebuilt red brick axial ridge stack. (R. Parker, *The common stream*)

Ref Fo09	Survey	1993	DDSR			
Age/date	14	1979	72	1907		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y					

Note: Last thatched by master thatcher D D Stanford in 1979, and before that by his father C G Stanford in 1907 (DDSR).

Fo 10: No 4 (Cottage on the Green), The Green

Grid Ref TL 40814806

Timber-framed cottage with plaster render, possibly built as an open hall in 1501 for Richard Peppercorn. The floor and stack were inserted into the hall in 1583. (R. Parker, *The common stream*)

Ref Fo10	Survey	1993	DDSR			
Age/date	3	1990	43	1947		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1990, and before that by his uncle William Stanford in 1947. The base layer survives and there appears to be smoke-blackening over the area of the former hall. There is also some soot encrustation to the roof timbers.

Fo 11: Nos 1 and 3 Mortimers Lane

Grid Ref TL 41394843

Timber-framed cottage with a roughcast render, built in 1575 for William Gybson. The building was subdivided during the early C19. The roof has a half hipped end with a C19 brick ridge stack.

Ref Fo11	Survey	1993	DDSR			
Age/date	12	1981	39	1942		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1981, and before that by his father C G Stanford in 1942 (DDSR).

Fo 12: No 50 (Severals) High Street

Grid Ref TL 41224838

Roughcast timber-framed cottage, built in 1560 for John Everard. The ridge and end stacks have been rebuilt in the C19. The attic storey at the east end is jettied on exposed joists. (R. Parker, *The common stream.*)

Ref Fo12	Survey	1993				
Age/date	5-10	1983-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Fo 13: Nos 73 and 75 High Street

Grid Ref TL 41304842

Plaster rendered timber-framed cottage, built in 1620 for Richard Allen. Originally the cottage was one dwelling but has now been divided into two. Red brick stack, consisting of a diagonally set group of shafts on a square base. (R. Parker, *The common stream*)

Ref Fo13	Survey	1993				
Age/date	5-10	1983-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

FOWLMERE Fw

Fw 01: Thatched Cottage, Long Lane

Grid Ref TL 42044590

Roughcast rendered timber-framed cottage *c.* C17. There is a stack beyond the ridge to the right of the centre with the upper courses rebuilt, and an end stack to the left hand side.

Ref Fw01	Survey	1993	DDSR			
Age/date	17	1976	37	1939		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1976, and before that by his father C G Stanford in 1939 (DDSR).

Fw 02: The Cottage, Lower Farmhouse, Shepreth Road

Grid Ref TL 41694636

Timber-framed farmhouse built in the late C17. There is a half-hipped roof with a rebuilt gault brick ridge stack to the right of centre.

Ref Fw02	Survey	1993	DDSR	1993		
Age/date	17	1976	36	1940		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat						
Wired	Y					

Note: The last re-thatch was carried out by D D Stanford in 1976, and before that by his father C G Stanford in 1940.

Fw 03: Eden Cottage, High Street

Grid Ref TL 420745591

C17 timber-framed cottage with plaster render, some C19 and C20 additions. There is a red brick central ridge stack with an additional gault brick stack to the left.

Ref Fw03	Survey	1993				
Age/date	12	1981				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher D D Stanford in 1981 (DDSR).

Fw 04: No 4 Chapel Lane

Grid Ref TL 42184559

Late C15 timber-framed cottage, partly plastered, with evidence of C17 alterations, half hipped roof, with a red brick ridge stack to the right of the junction with a cross wing. This building originally an open hall with a two storeyed jettied cross wing of two timber-framed bays. The medieval roof has been removed.

Ref Fw04	Survey	1993	DDSR			
Age/date	17	1976	36	1940		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat						
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1976, and before that by his uncle master thatcher Edward Stanford in 1940 (DDSR).

GREAT ABINGTON Ga

Ga 01: No 109 High Street

Grid Ref TL 53194864

Timber-framed cottage with plaster render, built in the C15, with C16 alterations, converted into two cottages during the C19. There is a red brick ridge stack, the exposed side walls are constructed with reused C14 Clunch, carved with symbols of the de Vere family and a frieze with cusped tracey. The collars and some roof rafters are smoke blackened.

Ref Ga01	Survey	1993				
Age/date	20	1973				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx3					
Wired	Y					

Note: The last rethatch was carried out by Dodson Brothers in 1973 (DDSR pers. com.) in their characteristic hybrid method.

HASLINGFIELD Ha

Ha 01: No 46 (Logie Cottage), Barton Road

Grid Ref TL 40355285

Late C18 timber-framed cottage with plaster render on a brick plinth. There is a single end stack with a projecting flue. The roof has two swept dormers inserted within it.

Ref Ha01	Survey	1993	DDSR			
Age/date	13	1980	35	1945		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y		Y			

Note: Last re-thatched in 1980 by master thatcher D D Stanford, and before that by his uncle master thatcher Edward Stanford in 1945 (DDSR).

HORSEHEATH Ho

Ho 01: Wigscroft and the Retreat, High Street

Grid Ref TL 61374714

Early C18 pair of cottages, date confirmed by a dated brick on east gable wall. Flint rubble and red brick dressings, part now rendered. Ground floor and attic with two dormer windows, brick chimney stack. A single-storeyed extension to the front once formed a shop.

Ref Ho01	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 02: Apple Tree and Rowley Cottage, Cardinals Green

Grid Ref TL 62014638

Late C17 timber-framed cottage with plaster render, now extended by a gabled wing on the north-east. Ground floor and attic with dormer and a ridge stack with a single flue.

Ref Ho02	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 03: Chapel View, West Wickham Road

Grid Ref TL 61354739

C17 timber-framed cottage with plaster render. Ground floor and attic with a dormer window, an axial ridge stack. An added outhouse to the south is timber-framed and weatherboarded.

Ref Ho03	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 04: White Chimneys and Garage, Cardinals Green

Grid Ref TL 61514642

C16, timber-framed with external plaster render, a single range, extended at each end by one bay and an outshut at the back. The two-storeyed central bays date from the C16 and were originally jettied at the east end, where a further bay and a chimney-stack comprising diagonally grouped shafts set on a square base was added in the C17 with the new roof rising to a distinctly different level. Extensions to the west, probably dating from the late C18, are timber-framed and plaster rendered. The C16 part of the cottage has a crown-post roof, with two-way bracing to the collar-purlin and a downward brace to the tie-beam. The ceiling framing is also exposed.

Ref Ho04	Survey	1993	CC Yhors K6 48677	1960		
Age/date	15-20	1973-78	15-20	1940-45		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The garage is also thatched in water reed, but in very poor condition, and estimated to be in excess of 40 years old.

Ho 05: The Thatched Cottage, Cardinals Green

Grid Ref TL 61844629

C18 timber-framed cottage with a render of plaster, ground floor and attic, and an external chimney-stack to the south gable.

Ref Ho05	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 06: Lydale Cottage, Haverhill Road

Grid Ref TL 61224716

Late C17 timber-framed cottage with plaster render, ground floor and attic with a tiled gabled dormer, and a red brick axial ridge stack.

Ref Ho06	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 07: Norfolk House, Linton Road

Grid Ref TL 61184717

C17 timber-framed cottage, with C16 cross wing, plaster rendered, C17 red brick ridge stack to the main range and an inserted ridge stack to the cross wing, also C17. The cross wing is of two storeys, and was probably a solar wing to a hall house; the first floor is jettied on shaped brackets with exposed close studding, and evidence of early window openings. The main range consists of a ground floor and attic with two dormers.

Ref Ho07	Survey 1993					
Age/date	10-15	1978-83				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 08: Limberhurst Thatch, Haverhill Road

Grid Ref TL 62154645

Early C17 timber-framed cottage, rendered, extended during the late C17 or early C18. Ground floor and attic with two eyebrow dormer windows and a brick ridge stack. An extension to the south is timber-framed and rendered, with an end stack and thatched to match the original roof.

Ref Ho08	Survey 1993		CC 1960 Yhors K6 48675		NMRC 1935 Bdg Files 19323	
Age/date	20-25	1968-73	20-25	1935-40	20-25	1910-15
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	BC	S
Base coat	TW					
Wired	Y		N		N	

Ho 09: Forge Cottage, Haverhill Road

Grid Ref TL 61274719

C17 timber-framed cottage, extensively remodelled, ground floor and attic with a modern dormer window, and a ridge stack. The central bay was probably originally open to the roof, but now has an exposed C18 chamfered ceiling beam while the end rooms have exposed joists dating from the C17. To the north is a modern cross wing.

Ref Ho09	Survey	1993				
Age/date	15-20	1973-78				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 10: The Old Thatch, Haverhill Road

Grid Ref TL 61504640

C17 timber-framed cottage with plaster render, ground floor and attic, with modern dormers, and a ridge stack.

Ref Ho10	Survey	1993				
Age/date	15-20	1973-78				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ho 11: The Cottage, Cardinals Green

Grid Ref TL 61514641

C17 timber-framed cottage with a render of plaster, ground floor and attic with modern dormers, and a ridge stack.

Ref Ho11	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

LANDBEACH La

La 01: No 35 (The Plague House), High Street

Grid Ref TL 47716498

Late medieval or early C16 timber-framed cottage, with a plaster render, some parts reconstructed in the local gault brick. The original L-plan comprised two open halls, with an early C16 cross wing to the north. There are two chimney stacks, one ridge stack, which was probably inserted during the C17 together with attic floors, some of which have been recently removed, and there is an end stack. Lighting the attic are two windows, one a casement, the other a pan tiled gabled dormer window with horizontal sliding sashes.

Ref La01	Survey	1993	MNRC Bdg Files 14457	1967	CAS IV 3	1935
Age/date	15-20	1973-8	20-25	1942-7	25-30	1905-10
W Coat	WR		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	-					
Wired	Y		N		N	

Note: The photo of 1967 show signs of extensive damage to the ridge, eaves and gables by birds, and slippage of the thatch.

La 02: No 53 (Glebe Cottage), High Street

Grid Ref TL 47756483

Late C17 timber-framed cottage, plaster rendered, with a ground floor and attic with gabled dormers of various sizes and a C17 local brick ridge stack. Lobby-entry plan with extension in outshut at the rear for a dairy, and an attached outbuilding on the south gable, possibly contemporary.

Ref La02	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

La 03: Tithe Barn, No 14 (The Old Rectory), Green End

Grid Ref TL 47726532

C16 timber-framed barn with weatherboarding. There are opposing double entries. The oak door in the east elevation has a segmental arched head.

Ref La03	Survey	1993	CAS IV 1	1931		
Age/date	15-20	1973-8	10-15	1916-21		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	UD		
Base coat	TW					
Wired	Y		N			

La 04: No 95 (Skatchbow Cottage), Green End

Grid Ref TL 47586562

Late C17 cottage partly timber-framed and rendered with plaster, partly of clunch and brick. Three bays with a ground floor and attic with a dormer window, and a local brick ridge stack.

Ref La04	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

La 05: Nos 81 & 83, Green End

Grid Ref TL 47556551

Early C17 timber-framed cottage with a plaster render, ground and attic storey with two casement gabled dormer windows, of three bays with a central lobby entry, a central C17 ridge stack, and two gable end stacks. This has been extended to the north by one bay which includes an end and ridge stack.

Ref La05	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

La 06: No 21 High Street

Grid Ref TL 47676503

Early C16 timber-framed cottage encased in gault brick and weatherboarding, originally of three bays and containing an open hall. There are C17 and C18 additions which include the insertion of an attic floor over the hall, with two dormer windows, and an inserted C17 ridge stack, and there are a C18 dairy extension to the east, and a lower wing to the north, formally a shop, retaining its original shuttered window stop chamfered ceiling beams. There is a window located in the south elevation of the original open hall with timber diamond mullions.

Ref La06	Survey 1993					
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

La 07: Nos 77 & 79 (Jasmine Cottage), Green End

Grid Ref TL 47556548

C17 timber-framed cottage of two main periods with a render of plaster, three bays, ground floor and attic with a dormer window, a central ridge stack of clunch.

Ref La07	Survey 1993					
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

La 08: No 34 High Street

Grid Ref TL 47716489

C18 timber-framed cottage cased in local brickwork with the exception of one gable which is weatherboarded, ground floor and attic with a casement dormer, a ridge stack and an end stack on the south gable, a rear extension of one storey.

Ref La08	Survey 1993					
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

La 09: Nos 8, 10 & 12, Green End

Grid Ref TL 47656523

C16 and C17 timber-framed cottage with a combination of external plaster render and weather boarding, now split into three dwellings, but formerly a farmhouse. This was possibly rebuilt with two storeys in the C17 on the site of an original hall, and retains some early timbers. Adjacent to the north is a C16 axial wing, with an under built jetty, and to the west is an early C16 double-jettied wing. There is a gault brick stack to the north gable, and two C17 local brick ridge stacks, one to the west wing.

Ref La09	Survey 1993		CAS 1928 I 9 & III 3			
Age/date	60-70	1923-33	5-10	1918-23		
W Coat	WR		WR			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

La 10: Clarks Cottage, Green End

Grid Ref TL 47676552

C17 timber-framed cottage with a render of plaster, ground floor and attic with modern dormers, and a ridge stack.

Ref La10	Survey	1993				
Age/date	15	1978				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: date of re-thatch given by current owner, name of thatcher unknown.

LITLINGTON Li

Li 01: Oak Cottage and Acorn Cottage, South Street

Grid Ref TL 31504267

Late medieval or early C16 timber-framed cottage, with an external cladding of plaster render and weatherboarding. Despite extensive alterations throughout its life, a smoke bay and the roof void above the ceiling in the attic have areas of smoke blackened thatch present, conclusive evidence that this was a mediaeval hall house. Originally of three bays, the central bay was open to the roof, but floored over at a later date. A local red brick stack with an inglenook has been inserted into the bay. The cross passage lay just to the south of this and there is evidence of its former presence in the timber crossbeam whose underside is cut with mortises that once held a partition. A second clunch stack has been inserted at the intersection of the former open hall and the ground and first floor chambers to the south. The house has been extended to the north by one bay, and this is also heated by a clunch end stack. The timber casement windows in the attic appear to be original.

Ref Li01	Survey	1993	DDSR	1993	CAS V 8	1916
Age/date	2	1991	40	1951	15-20	1896-1901
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	FR	
Base coat	TWx2					
Wired	Y		Y		N	

Note: The partly smoke-blackened base layer is apparently original and consists of straw waste. This was observed by John Letts from within what appears to be a smoke bay into which the existing chimney has been inserted. Access to the roof void is restricted so full assessment of the smoke blackening is difficult. The previous re-thatch was carried out in 1991 by master thatcher D D Stanford, and before that by his cousin Ted Stanford in 1951 (DDSR).

Li 02: Burr Cottage, Burr Lane

Grid Ref TL 31264287

Late C17 timber-framed cottage, with C19 additions, exterior of painted roughcast render and clay bats set on a painted brick plinth. Two-storeyed main range with single storey gabled extension to the left-hand side and partially rendered end stack. The roof is partly thatched and partly red pantiled.

Ref Li02	Survey	1993				
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Li 03: Patch Cottage, Royston Road

Grid Ref TL 31414252

Late C17 timber-framed cottage rendered with plaster set on a painted brick plinth with C19 additions and some C20 renovations, ground floor and attic with a gabled casement dormer, ridge stack, and rear outshut and single-storey gable end extension to the left-hand side.

Ref Li03	Survey	1993	CC Ylitl K4 41237	1940		
Age/date	20-25	1968-73	10-15	1925-30		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		N			

Note: This dwelling was at one time known as the “Cottage”.

Li 04: No 13 (Elmlea Cottage) &14 (Casey Cottage), Silver Street

Grid Ref TL 31174282

Originally two cottages, now one, constructed during the C17, possibly with earlier origins. Timber-framed with a roughcast render and painted brick plinth. The main range is of one storey with a two-storeyed cross wing to the left-hand side with rear outshut. The attic storey contains two eyebrow windows, and there is a red brick ridge stack and rear stack to the to the cross wing.

Ref Li04	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Li 05: Cherry Trees Cottage, South Street

Grid Ref TL 31524278

Early C19 timber-framed cottage with a plaster render and weatherboarding to the gable ends, ground floor and attic with ridge stack.

Ref Li05	Survey	1993				
Age/date	9	1984				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The current re-thatch was carried out in 1984 by master thatcher D D Stanford (DDSR).

Li 06: The Nook, South Street

Grid Ref TL 31494278

A small late C17 or early C18 timber-framed cottage with plaster render and C20 additions, ground floor and attic with an eyebrow dormer window, a chimney stack on the west gable. The C20 modern extension is located at right angles to the original entrance.

Ref Li06	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Li 07: Thatchcroft Cottage, South Street

Grid Ref TL 31464261

C18 timber-framed cottage with plaster render, three bays with a lobby entry, ground floor and attic storey with three hip-roofed dormer windows, and a red brick ridge stack. There has been some renovation during the late C20.

Ref Li07	Survey	1993	DDSR	1993		
Age/date	9	1984	36	1948		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: The current re-thatch was carried out in 1984 by master thatcher D D Stanford, and before that by his cousin Ted Stanford in 1948.

Li 08: Threeways Cottage, South Street

Grid Ref TL 31534276

Late C17 timber-framed cottage rendered with plaster on a painted brick plinth, ground floor and attic with dormer windows, and a brick ridge stack.

Ref Li08	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatched by master thatchers Dodson Brothers, using their characteristic hybrid (DDSR pers. com).

MELBOURN Mb

Mb 01: No 7 The Moor, West

Grid Ref TL 38524510

C18 timber-framed cottage with roughcast external render, rebuilt after a collapse during restoration and greatly altered. Three bays with a lobby entry, C19 grey brick ridge and end stacks, of two storeys, the gable end facing the road with a C19 casement to the attic and another window and a boarded door.

RefMb01	Survey	1993				
Age/date	5-10	1983-88				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 02: No 8 (Melcam), The Moor South West

Grid Ref TL 38294467

C18 timber-framed cottage with roughcast external render. There is a single-flue grey brick ridge stack. Single range with entrance doorway now in the lean-to porch to the right hand side of the front elevation, ground and first floor, with two dormers in the attic. Single bay C19 single-storey addition to the left is clad with red pantiles.

Ref Mb02	Survey	1993				
Age/date	10-15	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 03: No 5 (Little Thatch), The Moor, West

Grid Ref TL 38524508

C18 timber-framed cottage with external plaster render. The building has been extended by one bay. The lobby-entry plan takes the form of a single bay, extended by another narrower bay to the left of the front.

Ref Mb03	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 04: No 3 (Long Thatch), The Moor, West

Grid Ref TL 38544507

Late C18 timber-framed and clay-bat cottage with plaster render. The entire frame sits on a flint plinth. The left hand clay bat gable has been repaired in brick. There is a grey brick ridge stack. The plan takes the form of three bays with a lobby entry, ground floor and attic with two original framed dormers.

Ref Mb04	Survey	1993				
Age/date	5-10	1983-88				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 05: No 2 The Moor, East

Grid Ref TL 38584503

C17 timber-framed cottage with plaster render, a single range of three bays, with a ground floor and attic, a single-flue ridge stack and two dormers. There is a fire insurance plaque on the front, together with a panel stating date of 1657.

Ref Mb05	Survey 1993		CC 1960 Ymel K6 48845			
Age/date	20-25	1968-73	10-15	1945-50		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC			
Base coat	TW					
Wired	Y		Y			

Mb 06: No 4 The Moor, East

Grid Ref TL 38584504

Late C17 exposed timber-framed cottage with external plaster render. Three bays with a lobby entry, ground and first floor. The building was extended with a single storey at the north-east service end by one bay during the C19, and there is also a late C20 extension to the rear.

Ref Mb06	Survey 1993					
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 07: No 11 (Winterbanks), Drury Lane, East

Grid Ref TL 38794490

C18 timber-framed cottage with plaster render. Two bays with a ground floor and attic. The main entrance doorway was originally opposite the stack, which consists of a single flue constructed from the local grey brick. There are two dormers in the attic which are of later date. The entrance doorway is now located in a thatched porch at the front.

RefMb07	Survey	1993				
Age/date	5	1988				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The last re-thatch was carried by master thatcher D D Stanford in 1988 (DDSR).

Mb 08: No 15 (Dog Kennel Farm), Dolphin lane, West

Grid Ref TL 37974464

Timber-framed, weatherboarded, on a brick plinth. There is a grey axial ridge stack. Single range with a lobby entry, ground and first floor.

Ref Mb08	Survey	1993				
Age/date	3	1990				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher D D Stanford in 1990 (DDSR).

Mb 09: No 6 (Old Cottage), Water Lane, South West

Grid Ref TL 38134426

C17 timber-framed cottage with lathe and plaster cladding, amd original red brick axial ridge stack. Single range, three bays with a lobby entry.

Ref Mb09	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 10: No 16 (Clare Cottage), Dolphin Lane, North East

Grid Ref TL 38104478

C19 two-storeyed cottage, constructed from clay bats on a brick and flint plinth, with a grey brick ridge stack. There is a late C20 wing to the rear.

Ref Mb10	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 11: No 18 Rose lane, North East

Grid Ref TL 38104478

C17 timber-framed cottage with plaster render. There is a single flue ridge stack. Ground floor and attic, with two dormers.

Ref Mb11	Survey	1993	DDSR	1993	Frith C 129	1920
Age/date	15	1978	38	1940	10-15	1905-10
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	TWx3					
Wired	Y		N		N	

Note: Last re-thatched by master thatcher D D Stanford in 1978, and before that by his uncle master thatcher Edward Stanford in 1940 (DDSR).

Mb 12: No 20 (Old Cottage), Rose Lane, North East

Grid Ref TL 45094477

C18 timber-framed cottage with external plaster render, on a brick and flint plinth. Two bays, ground floor and attic, a single flue ridge stack.

Ref Mb12	Survey	1993	Frith C 115	1920		
Age/date	40-45	1948-53	10-15	1905-10		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Mb 13: No 2 (Kirkdale), Station Road, North East

Grid Ref TL 38184486

Late C17 timber-framed cottage with external render. Two bays with a lobby entry, extended by one bay to the right hand side, ground floor and attic, with two dormers, axial ridge stack. The house is said to be dated 1709. In 1842 the cottage was owned by Thomas Jarman jnr and occupied by Samuel Ellis

Ref Mb13	Survey	1993				
Age/date	0-5	1988-93				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 14: No 6 Babraham Court, Drury Lane

Grid Ref TL 38684495

C16 timber-framed cottage with external plaster render. C18 and C19 extensions and a C18 side stack. Single range of three bays, ground floor and attic; the south gable was originally jettied, but is now under-built. The timber frame contains curved downward tension bracing and uniform scantling studwork.

Ref Mb14	Survey	1993	DDSR	1993		
Age/date	5	1988	40	1948		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TW					
Wired	Y					

Note: Last re-thatched by master thatcher D D Stanford in 1988, and before that by his father master thatcher C G Stanford in 1948 (DDSR).

Mb 15: No 15 Little Lane, North East

Grid Ref TL 38294463

Early C19 timber-framed cottage with external roughcast render There are two stacks of grey brick, viz. one ridge and one gable stack. The original plan has probably been altered. One bay to the north has been demolished and a single storey brick replacement built. The main building consists of a ground floor and attic. The rear elevation contains one dormer.

Ref Mb15	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Mb 16: No 3 Moat Lane, North

Grid Ref TL 38594512

Early C18 timber-framed cottage with external plaster render, three bays and a lobby entry, ground floor and attic, an early C18 red brick stack at right angles to the ridge. There are two dormers in the attic, one of which is gabled. In 1842 the cottage was owned by James Dickinson and occupied by Joseph Dickinson.

Ref Mb16	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 17: Nos 9 and 11 Little Lane, North East

Grid Ref TL 38294465

C17 timber-framed cottage with external plaster render. Originally one dwelling now two. A single range with a lobby, ground and first floors. Red brick ridge stack. The cottages have been extended by one bay to the east, and there is a large extension to the rear of No 9.

Ref Mb17	Survey	1993				
Age/date	10-15	1978-83				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 18: Nos 10 and 12 (The Ramblers), Mortlock Street

Grid Ref TL 38304465

C18 timber-framed cottage with plaster render, converted into two during the C19. There is a grey brick ridge stack and a later stack to the left hand side of the front elevation. Three bays and lobby entry, with an outshut to the rear. Ground and first floor. There is also a C19 slated single-storey lean-to at the rear.

Ref Mb18	Survey	1993	NMRC Bld Files 83916	1990		
Age/date	20-25	1968-73	15-20	1970-75		
W Coat	CWR		CWR			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Mb 19: No 31 (Millside), Station Road

Grid Ref TL 38124482

Late C17 timber-framed cottage with plaster render, a red brick ridge stack. Originally a range of three bays with a lobby entry, ground floor and attic, two dormers. C20 extension in form of wing and a brick, tiled outbuilding.

Ref Mb19	Survey	1993	CC Ymel K6 48846	1960		
Age/date	20-25	1968-73	15-20	1940-45		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC			
Base coat	TW					
Wired	Y		Y			

Mb 20: Nos 101 and 103 High Street

Grid Ref TL 38164452

Row of C18 timber-framed cottages with external plaster render. Restorations and enlargements to the rear of No 101. Two shared flues are diagonally set. The dwelling consists of a ground floor and attic, with two dormers.

Ref Mb20	Survey 1993		NMRC Red Box AA2/66&67 1961		Frith 113 1950	
Age/date	15-20	1973-8	20-25	1936-41	10-15	1935-40
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	-					
Wired	Y		N		N	

Mb 21: No 96 (Tollgate Cottage), High Street

Grid Ref TL 45064430

Late C17 timber-framed cottage with roughcast external render. One gable is clad in weatherboarding the other, constructed from clay bats. There is an original red brick axial ridge stack. Single range of three bays with a lobby entry, ground floor and attic, with one dormer.

Ref Mb21	Survey 1993		CC Ymel K6 48851 1960			
Age/date	10-15	1978-83	15-20	1940-45		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		Y			

Mb 22: No 14 Dolphin Lane

Grid Ref TL 38014463

C18 timber-framed cottage with plaster render, restored in the C20, of two storeys, with a grey brick ridge stack and lobby entry.

Ref Mb22	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 23: No 20 Dolphin Lane

Grid Ref TL 37994466

C18 timber-framed cottage, formerly a pair, now one, with plaster render, on a brick plinth, two storeys, two grey brick end stacks. An outhouse adjoins the left hand side.

Ref Mb23	Survey	1993	CC KmelK35 18435	1931		
Age/date	40-45	1948-53	20-25	1906-11		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	TWx2					
Wired	Y		N			

Mb 24: No 82 (The Thatched House), High Street

Grid Ref TL 45094441

C17 timber-framed cottage with C18 additions, rendered. Formerly two dwellings, now one, reflected in the differing ridge heights, two grey brick ridge stacks. The cottage to the north has two bays and a ground floor and attic, with two dormers and two casements. The cottage to the south has two storeys. The two entrance doors and a small modern shop window are of the same period.

Ref Mb24	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: Five intermediate coats exist between the base coat of threshing waste and the current weathering coat.

Mb 25: Nos 29 and 29a, The Moor

Grid Ref TL 38524508

C17 six-bay timber-framed barn with a queen-strut trussed roof, converted into six cottages, then converted again in the C19 into two houses. The frame is plastered. Two storeys with two C19 brick ridge stacks.

Ref Mb25	Survey	1993				
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 26: No 117 High Street

Grid Ref TL 38124443

Late C17 timber-framed cottage with plaster render, probably with a lobby-entry plan originally, two storeys, with a rendered brick ridge stack. There is a modern extension to the rear.

Ref Mb26	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 27: Nos 1-15 odd (Sheeps Head Row), High Street

Grid Ref TL 38734497

C17 row of timber-framed cottages. The three central bays have exposed framing, the rest are plastered, six single-flue grey brick ridge stacks. Ground floor and attic, with nine dormers. The majority of the timbers have varied scantling suggesting that they have been reused and probably date from the mid to late C17.

Ref Mb27	Survey	1993	CC YmelK2 1108 YmelK44 15716	1944		
Age/date	15-20	1973-8	10-15	1929-34		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: Last re-thatch carried out by master thatchers Dodson Brothers, using their characteristic hybrid method.

Mb 28: No 5 (Yew Tree Cottage), Drury Lane

Grid Ref TL 38754495

C18 timber-framed cottage, converted from one dwelling into two and then back into one. Now partly of clay bats, rendered, two bays and a lobby entry, ground floor and attic, with a dormer with a pantiled roof. A two-storeyed extension of 1984 is on the right-hand side.

Ref Mb28	Survey	1993	DDSR	1993		
Age/date	5	1988	45	1943		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last re-thatch carried out by master thatcher D D Stanford in 1988, and before that by his father C G Stanford in 1943 (DDSR).

Mb 29: No 7 Drury Lane

Grid Ref TL 38774493

Timber-framed cottage of *c.*1750 with external render, three bays with entry to low end of centre room, ground floor and attic with one original framed dormer, and a C19 single-flue grey brick ridge stack.

Ref Mb29	Survey	1993	DDSR	1993		
Age/date	7	1986	38	1948		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last re-thatch carried out by master thatcher D D Stanford in 1986, and before that by his cousin Ted Stanford in 1948.

Mb 30: No 25 (Norgetts Thatch), High Street

Grid Ref TL 38574498

Late C18 timber-framed cottage with roughcast render, three bays with a blocked lobby entry, ground floor and attic with two dormers, and two C19 grey brick stacks, one on the ridge and the other on the gable. In 1842 the cottage was occupied by Henry Chappell and described as tenements and garden.

Ref Mb30	Survey 1993		DDSR		Frith C 219 1952	
Age/date	0-5	1988-93	42-47	1946	5-10	1942-48
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	FR	
Base coat	-					
Wired	Y		Y		N	

Note: The last re-thatch was carried out by master thatcher Joyce in the late 80s or early 90s, and before that by master thatcher C G Stanford in 1946 (DDSR).

Mb 31: No 10 Station Road

Grid Ref TL 38144483

C17 timber-framed cottage, clad with lath and plaster, partly incised to imitate stone ashlar, two-bay lobby-entry plan with a kitchen and dairy addition at a lower level, ground floor and attic with two dormers, and an axial stack.

Ref Mb31	Survey 1993					
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 32: No 1 Drury Lane

Grid Ref TL 38774496

Early C18 timber-framed cottage with external render, two-bay lobby-entry plan, with a further narrower bay to the left hand side, ground floor and attic with two dormers, and a rendered ridge stack. The roof to the right was raised in the C19. Internally the original soft red brick hearth and bread oven are intact. There is timber framing with straight bracing intact in the rear wall, end, gable and ground floor partition wall. The cottage was subdivided in the early C19 when the roof was raised.

Ref Mb32	Survey	1993	DDSR			
Age/date	9	1984	36	1948		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last re-thatch carried out by master thatcher D D Stanford in 1984, and before that by his father C G Stanford in 1948 (DDSR).

Mb 33: No 127, 129 & 131, High Street

Grid Ref TL 38094434

C17 timber-framed cottage with exterior render, greatly altered during the C19. Ground floor and attic with two dormers, and a small ridge stack.

Ref Mb33	Survey	1993				
Age/date	0-5	1988-93				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Mb 34: No 25 (Pink Geranium Restaurant), Station Road

Grid Ref TL 38174480

Mid C17 timber-framed cottage, clad with lath and plaster, a single range of three bays, originally with a lobby entry, now removed, ground floor and attic with two dormers, and an original soft red brick axial ridge stack, with a small end stack constructed at a later date. Internally the wall frame and roof are exposed. The framing is uniform with substantial scantling and straight downward bracing, even to partition walls. There are abutting inglenook hearths. The red brick is exposed in part and the rest has been rendered. The roof has paired wind bracing between the principal rafters and purlins of the chimney bay. In 1842 the property was owned by John Hitch and occupied by Robert Deans.

Ref Mb34	Survey	1993				
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher Malcolm Dodson (DDSR).

Mb 35: Nos 2 & 4 (Old Hall House), Little Lane

Grid Ref TL 38274465

Late C15 timber-framed hall-house with plaster render, of three bays, the hall in the centre, the end bays storeyed, a jetty on the south gable; the north end was extended by two bays in the C17 and again to the rear in the C20. The original doorway to the hall is blocked. Smoke blackening in the central bay of the roof indicates the open hall. The unaltered C15 roof has clasped through-purlins, chamfered collars and paired and curved wind-bracing between purlin and principal. In 1842 the house was owned by Peterhouse College, Cambridge, and let as two tenements to William Course and William Day.

Ref Mb35	Survey	1993	CC Ymel K3 21107 YmelK44 35351	1944		
Age/date	15-20	1973-8	20-25	1919-24		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Note: The base layer appears to be ancient and consists of straw waste, but is not smoke blackened. This is probably due to the entire thatch being stripped off the roof at some point in antiquity, however, soot encrustation still remains on the timbers in the central roof area. The last re-thatch was carried out by master thatcher Malcolm Dodson (DDSR).

Mb 36: No 6 Little Lane,

Grid Ref TL 38274461

Mid C17 timber-framed cottage with plaster render, three bays and lobby entry, extended in the C20 with a small kitchen wing, ground floor and attic with three C20 dormers, and an original red brick ridge stack with the upper courses rebuilt in grey brick. The end bay to the right hand was originally open to the roof and was probably used for storage. In 1842 the cottage was owned by John Hitch and occupied by William Long.

Ref Mb36	Survey	1993	CC Ymel K3 45482	1930		
Age/date	30-35	1958-63	10-15	1915-20		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	TWx3					
Wired	Y		N			

Note: A large build-up of thatch in the 1930 photo suggests at least 3 re-thatches without the removal of much weathering coat.

Mb 37: Apple Tree Cottage, Orchard Road

Grid Ref TL 38264443

C17 timber-framed cottage with render, and brick repairs to gable ends. Originally a row of three cottages with extensive alterations during the C19, now one dwelling. A single range, with a ground floor and attic, with two dormers and a small ridge stack.

Ref Mb37	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Note: Last re-thatched by master thatcher Malcolm Dodson (DDSR).

Mb 38: Garage, Barham Court, Drury Lane

Grid Ref TL 38914496

A double garage of brick built in the early 1980s with buttressing piers. The roof has a conventional timber truss with purlins and ridge board.

Ref Mb38	Survey	1993				
Age/date	11	1982				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last thatched by master thatcher D D Stanford in 1982 (DDSR).

Mb 39: No 19 Drury Lane

Grid Ref TL 38924497

An early C18 timber-framed cottage, with a cladding of lath and plaster, rebuilt and extended after an extensive fire in 1990.

Ref Mb39	Survey	1993				
Age/date	3	1990				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The original thatch prior to the fire of 1990 was long wheat straw.

MELDRETH Me

Me 01: No 27 Whitecroft Road

Grid Ref TL 37454557

Late C18 timber-framed cottage with plaster render, a single range with a ground floor and attic, a grey brick end stack, and a small C19 thatched extension to the rear.

Ref Me01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 02: No 41 Whitecroft Road

Grid Ref TL 37324569

Late 17 timber-framed cottage with roughcast render replacing the original plaster and weatherboarding to both gable ends. Originally a single range of three bays, which included a small narrow pantry or larder bay, extended in 1993, adding a single storey range of kitchen etc. to form an L-plan. There original range consisted of a ground floor and attic with an original stack.

Ref Me02	Survey	1993	DDSR	1993		
Age/date	1	1992	40	1952		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y		Y			

Note: Last re-thatch was carried out by master thatcher D D Stanford in 1992, and before that by his cousin Ted Stanford in 1952.

Me 03: No 30 Whitecroft Road

Grid Ref TL 37474560

C17 timber-framed cottage with plaster render, of three bays with a lobby entry and a narrow pantry bay at one end, ground floor and attic with two dormers, and a red brick ridge stack, the upper courses having been rebuilt in grey bricks.

Ref Me03	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 04: No 32 Whitecroft Road

Grid Ref TL 37454560

Mid C17 brick cottage with plaster render, of two bays, extended by another bay to the gable and rear, ground floor and attic with a dormer window, and a small rebuilt red brick stack, and an end stack.

Ref Me04	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 05: No 23 (The Dumb Flea), Chiswick End

Grid Ref TL 37294549

C18 timber-framed cottage with plaster render, formerly a public house. A single range of two bays with a lobby entry, ground floor and attic with two original dormers and a C20 dormer at the rear, a red brick ridge stack with two flues. An early C19 addition of clay bats on a brick plinth was used as a cellar when the cottage was a beer house. In the garden there is a C19 timber-framed two-bay barn thatched in Long Wheat Straw.

Ref Me05	Survey 1993		CC 1920 YmeldK2 10926 & 10967 YmeldK28 26279			
Age/date	15-20	1973-8	5-10	1910-15		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Me 06: No 51 (The Dormers), High Street

Grid Ref TL 37604599

Timber-framed cottage of *c.* 1676 with plaster render, of three bays with a lobby entry, ground floor and attic with three dormers, and a painted ridge stack. The building was extended at both ends during the C18, the roof being raised.

Ref Me06	Survey 1993		CC 1965 YmeldK6 12339-40		NMRC 1950 Bdg Files 15921	
Age/date	20-25	1968-73	15-20	1945-50	10-15	1935-40
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	FR	
Base coat	TW					
Wired	Y		Y		N	

Note: Five distinct layers of thatch can be seen on the roof structure giving a clear indication of five periods of thatching material, all of them wheat straw. The 1950 photograph shows signs of slippage in the thatch.

Me 07: No 85 (Applecote), High Street

Grid Ref TL 37534634

Mid C17 timber-framed cottage with plaster render, extended in 1949, of three bays with a lobby entry, and a narrower pantry or storage bay to the right, ground floor and attic with one dormer, and a small C17 red brick ridge stack. The left-hand bay is open to the purlins.

Ref Me07	Survey 1993					
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 08: No 70 (Keys Cottage), High Street

Grid Ref TL 37664592

C17 timber-framed cottage with a plaster render, two bays, ground floor and attic, with a red brick ridge stack, a C20 two-storeyed brick extension which is also thatched.

Ref Me08	Survey 1993		CC 1968 YmeldK6 48866 YmeldK6 10952		NMRC 1949 Bdg Files 15925	
Age/date	15-20	1973-8	15-20	1948-53	15-20	1929-34
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	FR	
Base coat	-				Y	
Wired	Y		N		Y	

Note: The 1949 photograph shows slippage of the thatch.

Me 09: No 13 (Homeland), North End

Grid Ref TL 37544659

C17 timber-framed cottage with plaster render, of three bays with a lobby entry, ground floor and attic, with three dormers and a grey brick ridge stack.

Ref Me09	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatched by master thatcher Osbourne (DDSR).

Me 10: No 19 (The Cottage), North End

Grid Ref TL 37554665

Late C17 timber-framed cottage with plaster render, singly range with a lobby entry, extended during the C18 by one bay to the south, ground floor and attic with two dormers, and an axial red brick ridge stack with single flue.

Ref Me10	Survey	1993	DDSR	1993	CC YmeldK2 18140	1920
Age	4	1989	40	1949	5-10	1910-15
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	BC	D&S	FR	
Base coat	-					
Wired	Y		Y		N	

Note: Last re-thatched by master thatcher D D Stanford in 1989, and before that by his uncle master thatcher Edward Stanford in 1949.

Me 11: No 29 (Old Town House), North End

Grid Ref TL 37584676

Late C17 timber-framed cottage with plaster render, three bays with a lobby entry, one bay added at a later date, ground floor and attic with three dormer windows, and an original red brick ridge stack.

Ref Me11	Survey	1993	NMRC Bdg Files 15915	1949		
Age/date	10-15	1978-83	10-15	1934-9		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: A criss-cross ligger patten has been applied to the ridge of the outshut. The ridge on the main roof is plain. A small amount of bird damage has occurred to the main roof.

Me 12: No 36 (Mill House), North End

Grid Ref TL 37814662

Mid C18 timber-framed granary, originally weatherboarded, now with plaster render, converted in 1940 to a house and extended in the mid C20. Two storeys, three dormer windows, and a ridge stack were inserted at the time of the conversion in 1940.

Ref Me12	Survey	1993	NMRC Blg Files 15919	1949	CAS I 6	1925
Age/date	15-20	1973-8	15-20	1929-34	15-20	1905-10
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	TWx2					
Wired	Y		Y		N	

Me 13: No 3 (Meldreth Thatch), Station Road

Grid Ref TL 37694516

Late C17 timber-framed cottage with plaster render, a single range with a lobby entry, ground floor and attic with dormer windows and a ridge stack, extended during the C20 with a two-storeyed cross wing to the east.

Ref Me13	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 14: No 9 (Fieldgate Cottage), Station Road

Grid Ref TL 37684510

Late C17 timber-framed cottage with plaster render, the timber framing partly exposed, a single range of three bays, ground floor and attic. The original entrance door is in a large mid C20 brick addition to the east, which is of rendered brick and thatched.

Ref Me14	Survey	1993	NMRC Blg Files 15935	1950		
Age/date	1	1992	10-15	1935-40		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Note: There is an extensive amount of recent patching shown in the the 1950 photograph (NMRC Blg File 15935). Notes within these files also indicate that the living room could have been open to the roof at one point, suggesting an open hall. The last re-thatch was carried out by master thatcher D D Stanford in 1992 (DDSR).

Me 15: No 61 (Orchard Road), Station Road

Grid Ref TL 37924502

Once bearing the date 1662, a timber-framed cottage with plaster render, with three bays and a lobby entry, and a small C18 pantry extension to the north end, ground floor and attic with two dormers in the attic, and originally a ridge stack with red brick courses at the upper level supported on the timber frame and rendered in plaster, now replaced. The framing is similar to that of other cottages of the late C17, with straight downward bracing. In the C19 there was a blacksmith's forge adjoining the cottage.

Ref Me15	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Me 16: No 63 (Sheen Cottage), Station Road

Grid Ref TL 37944501

C18 timber-framed cottage with plaster render, two bays, ground floor and attic with a single dormer, and a grey brick single-flue chimney-stack. There are mid C20 brick additions to the rear. Adjoining the north end was a threshing barn, now demolished. It is possible that the cottage was converted from part of the barn.

Ref Me16	Survey	1993	CC YmeldK2 10896	1920		
Age/date	6	1987	10-15	1905-10		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: Last re-thatched by master thatcher Joyce in 1987.

Me 17: Nos 9 and 11 (Willow Way Cottages), North End

Grid Ref TL 37544658

This was a C17 row of timber-framed cottages with plaster render, now forming two dwellings, ground floor and attic with six dormers, and an original red brick ridge stack and two later C17 grey brick stacks. There is a C19 clunch extension to one end.

Ref Me17	Survey	1993				
Age/date	20	1973				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatched by master thatcher Osbourne in 1973 (DDSR).

Me 18: No 34 (Fordhams Cottage), Chiswick End

Grid Ref TL 37144549

Late C18 timber-framed cottage with plaster render, a single range with a ground floor and attic storey with dormer windows.

Ref Me18	Survey	1993	CC YmeldK2 38474	1920		
Age/date	20-25	1968-73	15-20	1900-05		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Me 19: Cottage adjacent to Almshouses, High Street

Grid Ref TL 37464664

Late C18 timber-framed cottage with plaster render, a single range with a ground floor and attic with dormer windows.

Ref Me19	Survey	1993	CC YmeldK28 32377	1928		
Age/date	10-15	1978-83	10-15	1913-18		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC			
Base coat	-					
Wired	Y		N			

ORWELL Or

Or 01: No 85 High Street

Grid Ref TL 36785044

C17 timber-framed cottage with plaster render. Originally a single range of three bays with later rear extension for a kitchen and the eastern end bay rebuilt during the C19, ground floor and attic, with a gabled dormer and a grey brick ridge stack.

Ref Or01	Survey	1993				
Age/date	5-10	1983-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 02: No 50 High Street

Grid Ref TL 36615039

Partly C17 timber-framed and partly C19 clay bat cottage, the framing plastered, on a brick plinth, of two bays, ground floor and attic, with a single flue ridge stack.

Ref Or02	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 03: No 16 Lotfield Street

Grid Ref TL 36225007

C17 timber-framed cottage with plaster render, rebuilt at the west end, two storeys, with an end stack rebuilt in the C19.

Ref Or03	Survey	1993	CC Yorw K35 41389	1935		
Age/date	15-20	1973-8	15-20	1915-20		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Or 04: No 11 Fisher's Lane

Grid Ref TL 36125048

Timber-framed cottage with roughcast render on a brick plinth, dated 1841 on the gable end to road. T-plan with two storeys and a grey brick ridge stack with three flues. The cottage was built on land allotted by the enclosure award to the Bendyshe family in 1836.

Ref Or04	Survey	1993	NMRC Blg Files 13923	1949	CC YorwK36 21410 Yorw K1 27193 1936	21410 27193
Age/date	10	1983	1	1948	10-15	1921-26
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	TW					
Wired	Y		N		N	

Note: There is evidence of at least 3 re-thatches indicated by the thickness of thatch shown in the photos contained NMRC Blg File 13923. Last re-thatched by master thatcher D D Stanford in 1983, and before that by his uncle master thatcher William Stanford in 1948 (DDSR). This would suggest that the photo of 1949 shows a thatched roof at the beginning of its life span which ran a possible 35 years.

Or 05: No 8 High Street

Grid Ref TL 36295041

C17 timber-framed cottage with plaster render, of two bays with a ground floor and attic, and one dormer. There is a modern extension to the front.

Ref Or05	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 06: Nos 10 and 12 High Street

Grid Ref TL 36325041

Originally a row of cottages built in two distinct phases in the C18 and C19. The earlier part timber-framed with a render of plaster, ground floor and attic with one gabled dormer, and a rebuilt ridge stack. This has been extended at the rear, and at the west end in clay bats with a white brick front wall and slate roof. The rear extension is of one bay, and timber framed with a combination of a weatherboard and plaster cladding.

Ref Or06	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The thatch shows 7 distinctive layers, indicating a possible time span of up to 200 years if each thatching lasted 40 years. The last re-thatch was by master thatcher Osbourne (DDSR).

Or 07: No 16 and 18 High Street

Grid Ref TL 36345041

C17 timber-framed cottage with plaster render and weatherboarding, extended at the south end, ground floor and attic with two gabled dormers, and a ridge stack. The gable end has a plaque of the Cambridgeshire Cottage Improvement Society who are now the owners.

Ref Or07	Survey	1993				
Age/date	11	1982				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatch was carried out by master thatcher D D Stanford in 1982 (DDSR).

Or 08: No 30 (Tudor House), High Street

Grid Ref TL 36425041

C15 timber-framed hall-house with a cross wing clad in plaster render. The open hall was of two bays but has been floored over and now has a ground floor and attic with a large modern dormer. Its crown-post roof survives.

Ref Or08	Survey	1993	CC Yorw K1 2084	1910		
Age/date	20-25	1968-73	10-15	1895-1900		
W Coat	CWR		LWS			
Ridge	BC	D&S	BC			
Base coat	-					
Wired	Y		N			

Or 09: No 62 High Street

Grid Ref TL 36735040

Timber-framed cottage, with part of the framing exposed and part rendered. Built in two distinct phases in the mid C16 and mid C17. Of five bays, the three bays to the west including a smoke bay, the two bays to the east being jettied, now all two-storeyed, with a ridge stack, its upper courses rebuilt.

Ref Or09	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 10: No 4 (Lordship Cottage), Town Green Road

Grid Ref TL 36195037

C18 timber-framed cottage with plaster render, additions and alterations during the C19, when the mid section of the roof was raised and clad with pantiles. Lobby-entry plan, ground floor and attic with a dormer window, a single-flue ridge stack and a later stack dating from the period of the roof alterations.

Ref Or10	Survey	1993	CC YorwK32 21414	1932		
Age/date	30-35	1958-63	10-15	1917-22		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Or 11: No 20 Stocks Lane

Grid Ref TL 36295023

Late C17 timber-framed cottage with plaster render, on a brick plinth. Three bays, ground floor and attic with a dormer. The lower part of the chimney-stack appears to be original and consists of a timber frame which has been rendered, the upper level of bricks resting on the timber framework.

Ref Or11	Survey	1993	DDSR	1993		
Age/date	11	1982	40	1942		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: There is a considerable build up of layers of thatch to one slope giving an indication of how long the roof has been thatched, this being approximately 80 years. The last re-thatch was carried out by master thatcher D D Stanford in 1982, and before that by his uncle Edward Stanford in 1942 (DDSR).

Or 12: No 69 (Lilac Farm), High Street

Grid Ref TL 36665043

Mid C17 timber-framed cottage with a plaster render, of two bays and a lobby entry, two storeys, and a red brick chimney-stack with string courses, which has been repaired.

Ref Or12	Survey	1993	NMRC Blg Files 13950	1949		
Age/date	10-15	1978-83	5-10	1939-44		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	D		
Base coat	-					
Wired	Y		N			

Or 13: No 30 Town Green Road

Grid Ref TL 36035011

Late C18 clunch cottage with a waterproof plaster render, three bays with a ground floor and attic, three dormers, two gabled with tiled surrounds, two end stacks, one to each gable. The bay to the south end is mid C19 and built from gault brickwork with red brick diaper and a tiled roof.

Ref Or13	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 14: No 33 (Toot Cottage), High Street

Grid Ref TL 36495044

Early C17 timber-framed cottage with plaster render, three bays with a lobby entry, ground floor and attic with a gable dormer, and a single-flue ridge stack, with the upper courses rebuilt in the C19 with white bricks. The roof is original and includes clasped side-purlins.

Ref Or14	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Or 15: No 59 High Street

Grid Ref TL 36625042

C16 timber-framed house with plaster render. Two bays survive of the C16 house, which is of two storeys. The east bay was rebuilt in the C19. There are two ridge stacks, both C19 insertions, the original ridge stack having been removed. The bay containing the hearth was originally open to the roof, a floor being inserted in the mid C17.

Ref Or15	Survey 1993		NMRC 1974 RBC BB74/377			
Age/date	0-5	1988-93	20-25	1949-54		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Or 16: No 35 (Town Green Cottage), Town Green Road

Grid Ref TL 36165018

Mid C17 timber-framed cottage with plaster render, three bays with a lobby entry, the chimney bay being narrower than the rest, ground floor and attic with a gabled dormer, a timber-framed and plastered ridge stack has been removed and now there is a late C17 end stack to the south gable of red brick.

Ref Or16	Survey 1993		DDSR 1993			
Age/date	14	1979	38	1941		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx2					
Wired	Y					

Note: Last re-thatch carried out by master thatcher D D Stanford in 1979, and before that by his uncle master thatcher Edward Stanford in 1941.

Or 17: No 37 (Town Green Farm), Town Green Road

Grid Ref TL 36135016

C16 exposed timber-framed house and barn converted into a single dwelling. The east-west range of two bays has two storeys with a jettied first floor, and closely set and uniform scantling studwork, a stack at the south-east end has been rebuilt. The perpendicular north-south range is also of two storeys.

Ref Or17	Survey	1993				
Age/date	16	1977				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The last re-thatch was carried out in 1977 by master thatcher D D Stanford (DDSR).

OVER Ov

Ov 01: No 36 (Glywood), Longstanton Road

Grid Ref TL 37756961

Late C17 timber-framed cottage, part with plaster render and part gault brick, lobby-entry plan with an a axial ridge stack, ground floor and attic with two dormers.

Ref Ov01	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ov 02: No 13 (Clifton Cottage), Church End

Grid Ref TL 37227073

Late C17 timber-framed cottage with plaster render and a brick plinth, one gable of gault brick, of two storeys, with a C19 brick stack and a C18 red brick stack to the left-hand gable. Said to be the curate's house.

Ref Ov02	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Notes: Five distinct layers of consecutive weathering coats can be seen upon this roof.

Ov 03: No 48 Fen End

Grid Ref TL 38007080

Mid C17 timber-framed cottage encased in painted brick, probably in the C19, and also a replacement brick wall in place of the original timber frame of the front elevation. Lobby entry with a ground floor and attic, with a grey gault brick shaft with diagonally set shafts on a square base.

Ref Ov03	Survey	1993	CC Yove K2 25719	1920		
Age/date	45-50	1943-8	15-20	1900-05		
W Coat	WR		WR			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ov 04: Nos. 50 & 52 (The Thatched House), High Street

Grid Ref TL 37447066

Late C17 timber-framed cottage with plaster render, on a masonry sill, ground floor and attic with two dormers, and a grey gault brick ridge stack.

Ref Ov04	Survey	1993	CC Yove K2 32256	1920		
Age/date	0-5	1988-93	30-35	1885-90		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ov 05: No 20 (Christ's Cottage), Station Road

Grid Ref TL 37167065

C17 timber-framed cottage, rendered,, lobby-entry plan, with a ground floor and attic with a red brick ridge stack.

Ref Ov05	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ov 06: No 20 West Street

Grid Ref TL 37656991

C17 timber-framed cottage with external render, ground floor and attic, and an axial stack.

Ref Ov06	Survey	1993	CAS IV 15	1916		
Age/date	15-20	1973-8	10-15	1901-06		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	UD		
Base coat	-					
Wired	Y		N			

Ov 07: No 30 Station Road

Grid Ref TL 37157062

Late C17 timber-framed cottage encased in gault brick, the end walls in English bond. Two bays with a lobby entry, a rear kitchen wing, also framed, ground floor and attic with two dormers, and a ridge stack. To the side of the cottage is a timber-framed outbuilding, clad with C20 bricks and thatched.

Ref Ov07	Survey	1993	CC Yove K0 7960	1910		
Age/date	15-20	1973-8	30-35	1875-80		
W Coat	LWS		WR			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ov 08: No 32 West Street

Grid Ref TL 37556989

Early C17 timber-framed cottage with plaster render, the front clad in yellow gault bricks during the C19, lobby-entry plan, ground floor and attic, with one dormer and an original red brick ridge stack with two diagonally set shafts on a square base with a splayed upper edge.

Ref Ov08	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ov 09: No 2 Hilton Street

Grid Ref TL 37477048

C17 timber-framed cottage, rendered, lobby-entry plan, ground floor and attic with dormer windows, and a brick ridge stack.

Ref Ov09	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatched by a master thatcher Malcolm Dodson (DDSR).

Ov 10: No 4 Hilton Street

Grid Ref TL 37487036

C17 timber-framed cottage, rendered, lobby-entry plan, ground floor and attic with dormer windows, and a brick ridge stack.

Ref Ov10	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

PAMPISFORD Pm

Pm 01: No 11 High Street

Grid Ref TL 49744814

Timber framed, late C17 cottage with plaster render. There is a central brick ridge stack.

Ref Pm01	Survey	1993				
Age/date	8	1985				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The last re-thatch was carried out by D D Stanford master thatcher in 1985 (DDSR) There is also present two distinct layer of intermediate thatch indicating at least two previous rethatches.

RAMPTON Ra

Ra 01: Nos 12 and 13, The Green

Grid Ref TL 42686795

Late C17 timber-framed cottage with a combination of plaster render and weatherboarding, on a rendered plinth, a single range with a lobby entry, two storeys, and a grey gault brick stack.

Ref Ra01	Survey 1993		CC 1920 Yram K2 14505			
Age/date	15-20	1973-8	15-20	1900-05		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-		Y			
Wired	Y		N			

Note: The 1920 photograph shows slippage of the thatch.

Ra 02: No 14 Church End

Grid Ref TL 42846796

C17 timber-framed cottage with plaster render, a single range with a lobby entry, ground floor and attic with two C20 dormers, an original ridge stack, and two C19 end stacks.

Ref Ra02	Survey 1993					
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ra 03: Nos 1 and 2 The Green

Grid Ref TL 42646802

C17 pair of reputedly timber-framed cottages encased in gault brick, a single range, ground floor and attic with two dormers, and a narrow red and yellow brick axial ridge stack.

Ref Ra03	Survey	1993				
Age/date	5-10	1983-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ra 04: No 31 High Street

Grid Ref TL 42455806

Late C17 timber-framed cottage with plaster render to the majority of the elevations with the exception of the lower part of the front, which has been encased in C19 gault brick and C20 common bricks. A single range of three bays, ground floor and attic with three tiled gabled dormers, and small ridge and end stacks.

Ref Ra04	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ra 05: No 1 and 3 King Street

Grid Ref TL 42366792

Mid C17 timber-framed cottages with plaster render, but the left hand wall is of brick and clay lump. The building was two cottages and a shop in the early C19, but has now been converted into one dwelling. A single range with a lobby entry, ground floor and attic, with one small window at eaves level, and a red brick ridge stack which has been re-pointed and cut down in height.

Ref Ra05	Survey 1993					
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ra 06: Church of All Saints, Church End

Grid Ref TL 42866811

C12 parish church enlarged in the C14 and C15 with major restorations in the C19 and C20. The church is built of puddingstone and limestone with some fieldstone with limestone and clunch dressings. West tower, nave and south aisle, with a red brick porch, chancel.

Ref Ra06	Survey 1993		NMRC Bdg Files 14179 1942		CC Yram K34 44987 1934	
Age/date	15-20	1973-8	15-20	1922-7	20-25	1909-14
W Coat	WR		WR		WR	
Ridge	BC	D&S	BC	D	FR	
Base coat	-					
Wired	Y		N		N	

Note: From this data one can conclude that, if they represent a single coat recorded in 1993 and a single previous coat recorded in both 1934 and 1942, as seems likely, this water reed thatch has had a possible maximum lifespan of approximately 69 years, a minimum of 46, but a more likely lifespan between about 51 and 64 years.

SHUDY CAMPS Sc

Sc 01: Thatch End, Mill Green

Grid Ref TL 62434539

C18 timber-framed cottage with plaster render, a single range of two bays, ground floor and attic with a dormer, and a single-flue ridge stack.

Ref Sc01	Survey	1993	CAS IV 3	1911		
Age/date	15-20	1973-8	10-15	1896-1901		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Sc 02: Barn at Priory Farm, Haverhill Road

Grid Ref TL 62864493

C18 timber-framed barn with an external cladding of weatherboarding, of five bays with a threshing floor and a midstrey on the north side. The purlin roof has wind-bracing.

Ref Sc02	Survey	1993				
Age/date	15	1978				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatched by master thatcher Osbourne in 1978 (DDSR).

Sc 03: House immediately east of Cardinals Yard, Cardinals Green

Grid Ref TL 62204636

C15 timber-framed plaster-rendered hall-house, the former open hall of two bays, now floored over with an inserted chimney-stack, a solar at the east end. The house is now of ground floor and attic with three eyebrow dormer windows and a ridge stack.

Ref Sc03	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The fleeking layer of thatching waste to this roof is smoke-blackened.

Sc 04: Broadview, Hockley Green

Grid Ref TL 61984446

C18 timber-framed cottage with plaster render, ground floor and attic with two dormers and an axial stack.

Ref Sc04	Survey	1993	CAS IV 8	1915		
Age/date	15-20	1973-8	5-10	1905-10		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Sc 05: The Riddings and Blacksmith's Cottage, Blacksmith Lane

Grid Ref TL 62314447

Row of C17 timber-framed cottages with plaster render, a single range, ground floor and attic with five gabled dormers and three ridge stacks.

Ref Sc05	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sc 06: Three Horseshoes, Main Street

Grid Ref TL 61654494

C17 timber-framed cottage with render, formerly an inn, a single range of three bays with a ground floor and attic with three dormer windows, and a ridge stack.

Ref Sc06	Survey	1993				
Age/date	0-5	1988-93				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sc 07: The Thatch, Main Street

Grid Ref TL 61184503

C18 timber-framed cottage with plaster render, a ground floor and attic with a dormer window, and a central ridge stack with a later external end stack.

Ref Sc07	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sc 08: Bramleys, Main Street

Grid Ref TL 61694490

C13 timber-framed hall-house with plaster render. The original part is of three bays but there is evidence for its having extended further. The hall was aisled but a base-cruck truss was inserted in the C14, and a C18 kitchen bay was added to the south gable. The hall was floored over in the C17 and a chimney-stack inserted. The house now has a ground floor and attic with a dormer window and a red brick ridge stack with diagonally set shafts on a square base. The house is of particular interest because of its early date and structure.

Ref Sc08	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The collars of the timber roof have been sooted by the open hall fire, and the base layer of thatching waste and remaining fleeking above this area is smoke blackened too. The soot encrustation begins one third of the way up each roof slope and extends to the apex.

SHEPRETH Sh

Sh 01: No 1 (Willow Cottage), Angle Lane

Grid Ref TL 39384797

Late C17 timber-framed cottage, rendered, of two bays with a lobby entry, a narrower bay possibly for a pantry on the right, and extended to the rear, ground floor and attic with two dormer windows.

Ref Sh01	Survey	1993	CC YshepY5 41183	1950		
Age/date	15-20	1973-8	5-10	1940-45		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The 1950 photograph shows slippage of the weathering coat, despite its new application.

Sh 02: No 67 Frog End

Grid Ref TL 39374696

C18 timber-framed cottages with plaster render, converted into one in the C19, of two storeys, with a grey brick ridge stack.

Ref Sh02	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Sh 03: No8 Meldreth Road

Grid Ref TL 39194792

Timber-frame cottage of *c.* 1660, with plaster render, a single range of two bays with a lobby entry, ground floor and attic with two dormers, and a red brick axial ridge stack with the upper courses rebuilt.

Ref Sh03	Survey	1993	CAS IV 9	1930		
Age/date	10-15	1978-83	10-15	1915-20		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The 1930 photograph shows slippage of the thatch. The last re-thatch was carried out by master thatcher Malcolm Dodson in the late 1970s or early '80s (DDSR).

Sh 04: No 28 (Lodge to Tyrells Hall), Fowlmere Road

Grid Ref TL 39664767

Early C19 dwelling constructed from clay bats rendered in plaster, ground floor and attic with two dormers, and a chimney-stack attached to the rear wall.

Ref Sh04	Survey	1993	NMRC Bdg Files 15720	1949		
Age/date	15-20	1973-8	10-15	1934-9		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Sh 05: No 10 (Rose Cottage), Meldreth Road

Grid Ref TL 39184792

Late C18 timber-framed cottage with plaster render, set on a brick plinth, with a small ridge stack. An early C19 extension facing the road is clad in slates.

Ref Sh05	Survey	1993	CC YshepK27 18202	1927		
Age/date	10-15	1978-83	10-15	1912-17		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: Last re-thatch was carried out by master thatcher Malcolm Dodson in the late 1970s or early 80s (DDSR).

Sh 06: No 12 (White Cottage), Angle Lane

Grid Ref TL 39604890

C18 cottage in which clay bat has replaced or covered the timber frame except in the upper part of the gables, two bays with a ground floor and attic and a grey brick end stack, its lower portion probably also constructed from clay bats.

Ref Sh06	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh07: Rushmoor Cottage, Dunsbridge Turnpike

Grid Ref TL 3996458

Originally a pair of early C18 timber-framed cottages, rendered, now converted to one dwelling, each former cottage of two bays, ground floor and attic with two dormer windows, and a shared ridge stack. A later cross wing may coincide with the turnpiking of the Cambridge road in 1793.

Ref Sh07	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 08: No 14 High Street

Grid Ref TL 39274777

C18 house constructed from clay bats with plaster render, and a clay bat ridge stack with the upper courses in grey brick. Two bays with a lobby entry, two storeys. At the rear is an early C19 timber-framed and partly weatherboarded and partly rendered barn.

Ref Sh08	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Note: The last re-thatch was carried out by master thatcher Malcolm Dodson in the late 1970s or early '80s (DDSR).

Sh 09: No 85 Frog End

Grid Ref TL 39454684

Late C17 timber-framed cottage with roughcast render, of two bays and a lobby entry, ground floor and attic, with two original dormers, and an axial ridge stack. A third bay was added later forming a pantry in a lean-to on the left side of the front.

Ref Sh09	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: Last re-thatch was carried out by master thatcher Malcolm Dodson in the mid 1970s (DDSR).

Sh 10: Barons Farmhouse, Angle Lane

Grid Ref TL 39454803

Early C16 house with late C17 additions, timber-framed with plaster render, the front wall with original pargetted panels decorated with birds claw foot, on a brick plinth, two bays of two storeys, a projecting red brick side stack to the rear wall with offsets and two joined hexagonal shafts. The north-east part of the building probably dates from the late C17, is also timber-framed with pargetting, and has an end stack of red brick with offsets and linked diagonally set shafts. An adjacent barn is dated 1763 on one of the tie beams.

Ref Sh10	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 11: Barns at No 10 (Rose Cottage), Meldreth Road

Grid Ref TL 39174792

Late C18 timber-framed threshing barn of four bays with a cladding of weatherboarding and plaster render, aisled on the north side. Adjoining, a second barn also C18 with plaster walls.

Ref Sh11	Survey	1993	CC YshepK27	1927		
Age/date	15-20	1973-8	20-25	1902-07		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Sh 12: No 21 (Riverside Cottage), High Street

Grid Ref TL 39344760

C17 timber-frame cottage with plaster render, of three bays with a lobby entry, a ground floor and attic with two dormers, one of which is gabled, a ridge stack and an end stack, and extension at the east end.

Ref Sh12	Survey	1993	CC Yshep K5	1950		
Age/date	15-20	1973-8	5-10	1940-45		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Sh 13: No 28 (Meadow Thatch), High Street

Grid Ref TL 39294966

C17 timber-framed cottage with plaster render, three bays, including a narrow bay at the rear of the stack, ground floor and attic with two dormers.

Ref Sh13	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 14: No 10 (Home Farmhouse), High Street

Grid Ref TL 39234782

Late C17 timber-framed cottage with plaster render, three bays with a lobby entry, ground floor and attic with two dormer windows, a ridge stack and an end stack.

Ref Sh14	Survey	1993	NMRC Bdg Files 15730	1949		
Age/date	15-20	1973-8	10-15	1934-9		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The photo of 1949 shows extensive areas of patching thus maintaining the roof to a serviceable standard, perhaps as a consequence of post-war shortages and restrictions in the building trades.

Sh 15: No 101 (Birdeage Row), Frog End

Grid Ref TL 39524572

C17 timber-framed cottage with lath and plaster cladding, single range with a lobby entry, ground floor and attic with a dormer window, and an axial ridge stack, subdivided in the C18 and extended at the west of end in the late C19 by one bay, timber-boarded with a low slate roof.

Ref Sh15	Survey 1993		NMRC 1983 Bdg Files 15728		CC 1978 YshepK78 41193-5	
Age/date	10-15	1978-83	0-5	1978-83	20-25	1953-8
W Coat	CWR		LWS		LWS	
Ridge	BC	D&S	BC	D&S	BC	D&S
Base coat	-					
Wired	Y		Y		N	

Sh 16: No 83 (The Limes), Frog End

Grid Ref TL 39444687

C17 timber-framed cottage with roughcast render, two bays and a lobby entry, ground floor and attic, with a ridge stack and projecting end stack, extended by a single-storeyed bay attached to one gable end.

Ref Sh16	Survey 1993		CC 1936 YshepK36 41186			
Age/date	20-25	1968-73	0-5	1931-6		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TWx2					
Wired	Y		N			

Note: There appear to be two distinct layer of previous rethatches.

Sh 17: No 77 (Museum Cottage), Frog End

Grid Ref TL 39424688

C17 timber-framed cottage with modern render, a single range with a lobby entry, with an axial chimney stack, and two dormer windows which appear to be original.

Ref Sh17	Survey	1993	DDSR	1993		
Age/date	14	1979	45	1934		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TWx3					
Wired	Y		Y			

Note: Last re-thatched in 1979 by master thatcher D D Stanford, and before that by his uncle master thatcher William Stanford in 1934 (DDSR). There also appears to be three distinct layer of previous rethatches.

Sh 18: Barn North East of Tyrells Hall, Fowlmere Road

Grid Ref TL 39574768

C17 timber-framed barn with a cladding of weatherboarding on a brick plinth, five bays, with a large double door opening to the central bay. Three of the bays have original arch-braced tie-beams and queen-strut roof trusses.

Ref Sh18	Survey	1993				
Age/date	5-10	1983-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 19: No 10 (Sheperheath Cottage), Fowlmere Road

Grid Ref TL 39414792

C17 timber-framed cottage with plaster render, much restored in the late C19, three bays, ground floor and attic with one gabled dormer, and a small ridge stack.

Ref Sh19	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 20: Halfway House, Dunsbridge Turnpike

Grid Ref TL 39644555

Formerly a public house probably built between 1823 and 1844 with a timber frame rendered with roughcast, single range with a lobby entry, ground floor and attic with three dormers windows, and ridge and end stacks. This part of the village was settled probably in the C18 and away from the village nucleus, perhaps associated with the development of the Cambridge-Royston road, which was turnpiked in 1793.

Ref Sh20	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sh 21: No 2 (Corner Cottage), Fowlmere Road

Grid Ref TL 39304795

Early C18 cottage built of clay bats on a flint plinth, with a render of plaster, subdivided in the early C19, but has now been converted back to a single dwelling. Two bays, extended in the C18 to the north-west and south-east, two storeys, a clay bat ridge stack with the upper courses replaced with grey gault brick.

Ref Sh21	Survey 1993		CC 1933 YshepK33 18201			
Age/date	10-15	1978-83	10-15	1918-23		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The last re-thatch was carried out by master thatcher Malcolm Dodson in the late 1970s or early '80s (DDSR).

STEEPLE MORDEN Sm

Sm 01: No 22 (Wayside Cottage), North Brook End

Grid Ref TL 29024428

Roughcast rendered timber-framed cottage built during the C17, with C19 alterations, a red brick ridge stack, and an external gault brick stack attached to the left hand gable.

Ref Sm01	Survey 1993		DDSR 1993			
Age/date	11	1982	37	1945		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TW					
Wired	Y		Y			

Note: The last re-thatch was carried out by D D Stanford in 1982, and before that by his father C G Stanford in 1945 (DDSR).

SHINGAY-CUM-WENDY Sw

Sw 01: Wendy Lodge

Grid Ref TL 33344839

Mid C19 Gothic gault brick house, formerly two estate cottages, symmetrical in plan and elevation, ground floor and attic, a rear outshut, two dormer windows and a central ridge stack.

Ref Sw01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Sw 02: The Porch House & Church End Cottage

Grid Ref TL 32214758

C18 timber-framed house with roughcast render on a tarred brick plinth, formerly two cottages, symmetrical plan with end gables, that to the south-west extended, ground floor and attic with two gabled dormers, and with a central ridge stack and two end stacks, one to each gable.

Ref Sw02	Survey	1993	CAS III 2	1936		
Age/date	15-20	1973-8	10-15	1921-6		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Sw 03: The Grove

Grid Ref TL 32404760

C18 row of timber-framed cottages with plaster render, now a single dwelling, ground floor and attic with four eyebrow dormer windows, and two gault brick ridge stacks.

Ref Sw03	Survey	1993	CAS III 4	1936		
Age/date	20	1973	45-50	1886-91		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: Last thatched by master thatcher Malcolm Dodson in 1973 (Pers. Com. to DDSR).

THRIPLOW Tr

Tr 01: Nos 5 and 7 (Anno Domini Cottage), Church Street

Grid Ref TL 44134691

Roughcast timber-framed cottage built during the early C17, jettied at the front. The east gable has the words and date "Anno Domini 1687" painted on it. There is a ridge stack together with a side stack to north, both rebuilt during the C19.

Ref Tr01	Survey	1993	DDSR	1993		
Age/date	8	1985	38	1947		
W Coat	LWS		LWS			
Ridge	BC	D&S				
Base coat	TWx3					
Wired	Y		Y			

Note: The last re-thatch was carried out by master thatcher D D Stanford thatcher in 1985, and before that by his uncle master thatcher Edward Stanford in 1947 (DDSR).

WATERBEACH Wa

Wa 01: No 16 (Box Tree Cottage), Way Lane

Grid Ref TL 49776540

Late C18 timber-framed cottage with plaster render, of three bays with a lobby entry, ground floor and attic with four gabled dormers and a ridge stack, and also a C19 stack at the side. A kitchen has been rebuilt as an outshut. There is an attached barn, weatherboarded and also thatched.

Ref Wa01	Survey	1993	CC Ywat J10 14860	1910		
Age/date	10-15	1978-83	15-20	1890-95		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	UD		
Base coat	-					
Wired	Y		N			

Wa 02: No 2 (Orchard House), Station Road

Grid Ref TL 49656521

Late C17 timber-framed cottage partly rebuilt in gault brick at the gable ends, ground floor and attic, with C19 gabled dormers which are tiled, the north-east gable with a tumbled parapet and end stack, the south-west gable stack with two diagonal shafts.

Ref Wa02	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wa 03: Barn to South West of No 2 (Orchard House), Station Road

Grid Ref TL 49636519

Early C17 timber-framed barn, weatherboarded, three bays with a single aisle to the south-west, side-purlin queen-strut roof.

Ref Wa03	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wa 04: No 31 (Cherry Cottage), Burgess Road

Grid Ref TL 50056590

Late C17 timber-framed cottage with plaster r0ender, three bays and lobby entry, ground floor and attic with two gabled dormers, and a ridge stack and an end stack to each gable.

Ref Wa04	Survey	1993	CC Ywat K1 33259	1910		
Age/date	15	1978	15-20	1890-95		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-		Y			
Wired	Y		N			

Note: The last re-thatch was carried out by master thatcher G. Bird in 1978 (DDSR).

Wa 05: Denny Lodge, Ely Road

Grid Ref TL 49316955

Late C17 timber-framed cottage with plaster render, lobby-entry plan, ground floor and attic with dormer windows, and a gault brick chimney-stack.

Ref Wa05	Survey 1993		CC 1900 Ywat K0 44604			
Age/date	30-35	1958-63	20-25	1875-80		
W Coat	WR		WR			
Ridge	BC	D&S	FR			
Base coat	-		Y			
Wired	Y		N			

Wa 06: No 1 (Sunny Side), Way Lane

Grid Ref TL 49826541

Late C17 timber-framed cottage with plaster render, lobby-entry plan, ground floor and attic with dormer windows, and a gault brick chimney stack.

Ref Wa06	Survey 1993		CC 1890 Ywat J9 44833 Ywat J9 52054			
Age/date	15-20	1973-8	15-20	1870-75		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: The roof in the 1890 shows signs of extensive patching, perhaps to counter damage caused by birds or vermin.

Wa 07: No 7 Greenside

Grid Ref TL 49686540

Late C17 timber-framed cottage with plaster render, lobby-entry plan, ground floor and attic with dormer windows, and a gault brick chimney-stack.

Ref Wa07	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

WESTERN COLVILLE Wc

Wc 01: Nos 46 & 47 Chapel Road

Grid Ref TL 62485231

C18 timber-framed cottage with plaster render, ground floor and attic with four gabled dormers, and an axial red brick ridge stack, with a C19 end stack to the east gable.

RefWc01	Survey	1993	CAS III 7	1914		
Age/date	15-20	1973-83	30-35	1879-84		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The photograph of 1914 from the CAS collection shows this building in a very advanced state of dilapidation with much slippage of the thatch.

Wc 02: Dove Cottage, Common Road

Grid Ref TL 63065177

Late C17 timber-framed cottage with plaster render incised to look like ashlar, the date 1683 on a reset plaster panel on a gabled dormer window at the front, three bays with a lobby entry, ground floor and attic with a dormer, and a ridge stack.

RefWc02	Survey	1993	NMRC Blg Files 18737	1951		
Age/date	25-30	1963-68	10-15	1936-41		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: This is an unusual case of a thatcher laying a spar-coat of water reed over a long wheat straw intermediate coat, presumably as an economy measure, since the roof would normally be entirely stripped before re-thatching in reed. The criss-cross ligger pattern to eaves, gables, and hips is characteristic of long wheat straw, but nevertheless used in reed. Perhaps the unidentified thatcher was unused to reed but, having to work in it, adapted it to the only method he knew. There is also evidence of previous re-thatches in the build-up of earlier layers.

Wc 03: No 58 (Green Cottage), Common Road, Weston Green

Grid Ref TL 62645222

C18 timber-framed cottage, rendered, a single range with a lobby entry, extended at the rear during the C19, ground floor and attic, with a single-flue ridge stack.

RefWc03	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Wc 04: Peacock Hall, Common Road, Weston Green

Grid Ref TL 62725214

Late C17 timber-framed cottage with plaster render, L-plan, two storeys, some refurbishment made during the C19.

RefWc04	Survey	1993	CAS III 3&4	1915		
Age/date	1	1992	10-15	1900-05		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The CAS photograph of 1915 shows extensive patching, probably to repair damage by birds and vermin.

Wc 05: College Farmhouse, Common Road, Weston Green

Grid Ref TL 63055186

Late C17 timber-framed cottage with plaster render, subdivided during the C19, and now again a single dwelling. Three bays with a later rear outshut, ground floor and attic with a gabled dormer, and a red brick ridge stack.

RefWc05	Survey	1993	NMRC Bdg Files 18737	1951	CAS III5&IV5 Ywes K1 7552	1910
Age/date	20-25	1968-73	10-15	1936-41	10-15	1895-1900
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat						
Wired	Y		Y		N	

Note: The photograph of 1910 in the CAS collection shows evidence of at least two previous re-thatches, and also general damage by birds and vermin. Both photographs show evidence of slippage of the thatch.

Wc 06: No 59 (Yew Tree Cottage), Common Road, Weston Green

Grid Ref TL 62665221

C18 timber-framed cottage encased in red brick, two bays with a lobby entry and a later lean-to outshut added to the south-east side, ground floor and attic with two box dormers on the north-west elevation, and a brick ridge stack.

RefWc06	Survey	1993				
Age/date	25-30	1963-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Wc 07: Covens Wood and Lane Cottage, Mill Hill

Grid Ref TL 62305260

Row of four C18 timber-framed cottages with plaster render, now converted to two, renovated and extended at the rear, ground floor and attic with three eyebrow dormers, and two ridge stacks.

RefWc07	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Note: The last re-thatch was carried out in the mid 1960s by master thatcher Leader (who worked rarely in Cambridgeshire, and then mainly in the north of the county) (DDSR).

Wc 08: Rose Cottage, Common Road

Grid Ref TL 62785210

C18 painted brick cottage, the east end rebuilt in the C19 containing the entrance, ground floor and attic with two gabled dormers, and a single-flue end stack..

RefWc08	Survey	1993					
Age/date	20-25	1968-73					
W Coat	LWS						
Ridge	BC	D&S					
Base coat							
Wired	Y						

Wc 09: Barbary Cottage, Common Road, Weston Green

Grid Ref TL 62845201

C18 timber-framed cottage with plaster render, extended at the south end during the C19, ground floor and attic, with a central ridge stack. Two single-storeyed bays were added during the C19 to the east end with a timber frame and pantiled roof.

RefWc09	Survey	1993					
Age/date	15-20	1973-8					
W Coat	LWS						
Ridge	BC	D&S					
Base coat							
Wired	Y						

Wc 10: No 73 (Thoresby Cottage), Common Road, Weston Green

Grid Ref TL 63265155

C15 rear wing with C17 front range, timber framed and rendered, ground floor and attic with a gabled dormer at the front, a half-hipped roof with a ridge stack.

RefWc10	Survey	1993					
Age/date	25-30	1963-8					
W Coat	WR						
Ridge	BC	D&S					
Base coat							
Wired	Y						

Wc 11: No 65 (Pathways), Common Road, Weston Green

Grid Ref TL 62835200

C17 timber-framed cottage, rendered, and renovated during the late C20. Three bays and lobby entry, ground floor and attic with gabled and boxed dormer windows, the roof half-hipped at the north-west, with a ridge stack, partly rebuilt, and thatched with exception of the south-east bay which is slated.

RefWc11	Survey 1993		CAS 1,915 III 1&2			
Age/date	20-25	1968-73	10-15	1900-05		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The 1915 photograph shows slippage of the thatch.

Wc 12: No 60 (Lupin Cottage), Common Road, Weston Green

Grid Ref TL 62755213

C17 timber-framed cottage with wattle and daub infill, subdivided and extended about 1840, now restored as one dwelling. Three bays, ground floor and attic with two gabled dormers, boarded eaves, a hipped roof and a ridge stack.. The 1840 addition has a slate roof.

RefWc12	Survey 1993		CAS 1920 IV 2			
Age/date	25-30	1963-8	15-20	1900-05		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Note: The 1920 photograph shows slippage of the thatch.

Wc 13: Lane House, Mill Hill

Grid Ref TL 62295261

Late C16 timber-framed cottage, rendered, and extended by one bay at the north-east end probably during the late C17. Three bays with a lobby entry, ground floor and attic with a gabled dormer, and two single-flue ridge stacks.

RefWc13	Survey 1993		NMRC Bdg Files 18735 1951			
Age/date	10-15	1978-83	10-15	1936-41		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D		
Base coat						
Wired	Y		N			

WHADDON Wd

Wd 01: Frog Hall, Bridge Street

Grid Ref TL 35294541

C16 timber-framed house, rendered in plaster, with C20 cross-wing, ground floor and attic with four eyebrow dormer windows, and rebuilt chimney-stacks.

Ref Wd01	Survey	1993	CAS IV 46	1925		
Age/date	15-20	1973-8	10-15	1910-15		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Wd 02: No 100 (Rose Cottage), Church Street

Grid Ref TL 34824653

Late C17 or early C18 timber-framed house converted from a former row of cottages, ground floor and attic with four eyebrow dormer windows and a ridge stack and end stacks of gault brick.

Ref Wd02	Survey	1993	CC Ywha K88 37106	1988		
Age/date	15-20	1983-8	10-15	1973-8		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat						
Wired	Y		Y			

Wd 03: No 122 (Avondale), Bridge Street

Grid Ref TL 35004548

Small timber-framed cottage of the late C18 or early C19 with a roughcast render, ground floor and attic with two eyebrow dormer windows and a red brick ridge stack.

Ref Wd03	Survey	1993	DDSR	1993		
Age/date	8	1985	39	1946		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TW					
Wired	Y		Y			

Note: Last re-thatched in 1985 by master thatcher D D Stanford, and before that by his uncle master thatcher Edward Stanford in 1946 (DDSR).

Wd 04: No 58 (Firbanks), Bridge Street

Grid Ref TL 34894593

Formally two C18 timber-framed cottages now converted as a single dwelling, extended and partly raised to two storeys.

Ref Wd04	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The ridge has been re-thatched in the last five years with sedge.

Wd 05: 40 and 42 Bridge Street

Grid Ref TL 34914595

A pair of early C18 timber-framed cottages with roughcast render, ground floor and attic with an eyebrow dormer, a ridge stack, later extended and partly raised to two full storeys with a half-hipped roof.

Ref Wd05	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wd 06: No 70 (Jarmens), Bridge Street

Grid Ref TL 34974577

One of an early C17 pair of timber-framed cottages with plaster and pebbledash render, ground floor and attic with later dormer windows and end stacks, one cottage extended at the rear with a lean-to.

Ref Wd06	Survey	1993	CAS III 3 & 4	1928		
Age/date	10-15	1979-83	15-20	1908-13		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Wd 07: No 68 (Jarmens), Bridge Street

Grid Ref TL 34974577

One of an early C17 pair of timber-framed cottages with plaster and pebbledash render, ground floor and attic with later dormer windows and end stacks, one cottage extended at the rear with a lean-to.

Ref Wd07	Survey	1993	CAS III 3 & 4	1928		
Age/date	25-30	1963-8	15-20	1908-13		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Wd 08: White Cottage, Dyers Green, Bridge Street

Grid Ref TL 35314552

A pair of C18 timber-framed cottages with plaster render now converted to a single dwelling with C20 additions, ground floor and attic with a dormer window, a red brick ridge stack and a gault brick end stack.

Ref Wd08	Survey 1993		CAS 1925 IV 43-44			
Age/date	20-25	1968-73	10-15	1910-15		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Wd 09: No 96 (The Wilderness), Meldreth Road

Grid Ref TL 35504630

Late C17 timber-framed cottage, plaster rendered, on a red brick plinth, three-bay lobby-entry plan, ground floor and attic with a dormer window, and a gault brick ridge stack, extended in the C20.

Ref Wd09	Survey 1993					
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wd 10: No 106 (Moss Vale), Bridge Street

Grid Ref TL 34994556

C17 timber-framed cottage with plaster render, three-bay lobby-entry plan, originally of one storey but raised to two, with an eyebrow dormer window in the attic, and a red brick ridge stack together with a gault brick stack to the left hand side.

Ref Wd10	Survey 1993					
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wd 11: No 132 Church Street

Grid Ref TL 34874635

Late C17 timber-framed cottage with roughcast render, and a gault brick stack to the left.

Ref Wd11	Survey	1993	CC YwhaK88 37103-4	1925		
Age/date	25-30	1963-8	5-10	1915-20		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	D		
Base coat	-					
Wired	Y		Y			

Wd 12: Nos 126 & 128 (The School House), Church Street

Grid Ref TL 34874637

Row of late C17 timber-framed cottages with roughcast render on a painted black brick plinth, ground floor and attic with three eyebrow dormer windows and two brick ridge stacks. The building was used as a Sunday School in 1846 and probably continued as such until 1875 when a new school was built.

Ref Wd12	Survey	1993	CC YwhaK88 37105	1988		
Age/date	15-20	1973-8	15-20	1968-73		
W Coat	WR		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Wd 13: No 92 (Folly Cottage), Meldreth Road

Grid Ref TL 35454629

Late medieval timber-framed cottage with plaster render, a three-bay plan, a formerly open hall in the centre, now floored over and with an inserted chimney-stack, and end bays with a ground floor and attic. The roof has side-purlins, and the hall roof is now plastered directly onto the fleeking layer of the thatch.

Ref Wd13	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The roof voids to the chambers either side what was the original open hall revealed areas of smoke blackening to the thatch material and roof structure.

Wd 14: No 129 (The Close), Meldreth Road

Grid Ref TL 35734653

A C17 timber-framed house, formerly a farmhouse, altered in the C19 and C20, rendered with roughcast, T-plan, two-storeyed, the main range originally with three rooms on each floor, the rear wing slightly taller, a brick chimney-stack at the junction of the two wings, and also a C19 brick end stack.

Ref Wd14	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

WEST WRATTING We

We 01: Nos 92 (Pear Tree Cottage) and 94, High Street

Grid Ref TL 60385234

C17 timber-framed cottage, rendered, originally with a lobby-entry plan but extended during the C19 at the south-east, ground floor and attic with a gabled dormer, and an axial ridge stack with two flues. The C19 single-storeyed extension has a lower ridge than that of the main roof, and a red brick stack has been inserted between the gable and the extension.

Ref We01	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 02: Nos 82 and 84 High Street

Grid Ref TL 60455230

C17 timber-framed house, rendered, with a lobby-entry plan, altered in the C19, ground floor and attic with three gabled dormers, probably insertions, and a single-flue ridge stack and end stacks, which were probably rebuilt during the C19, a lean-to at the south-east end.

Ref We02	Survey	1993	CAS IV 13 & 23	1917		
Age/date	15-20	1973-8	5-10	1907-12		
W Coat	WR		LWS			
Ridge	BC	D&S	BC			
Base coat	-					
Wired	Y		N			

We 03: No 48 (Haylocks), High Street

Grid Ref TL 60575208

Mid C17 timber-framed cottage, rendered, of three bays with a lobby entry, ground floor and attic with three large modern dormers, extended by two bays in the C18 or C19 with a brick end stack

Ref We03	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 04: No 85 (Honeysuckle Cottage), High Street

Grid Ref TL 60295230

C17 timber-framed cottage, rendered, of three bays, ground floor and attic with two modern box dormers, and a single-flue ridge stack.

Ref We04	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 05: No 83 High Street

Grid Ref TL 60305230

C18 timber-framed cottage on a brick plinth and rendered, of two bays, ground floor and attic, with a stack to one side.

Ref We05	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 06: No 7 (Rose Cottage), High Street

Grid Ref TL 60785187

Late C17 timber-framed cottage, rendered, ground floor and attic with a dormer window, and a red brick ridge stack, a thatched single-bay addition to the north-west.

Ref We06	Survey	1993	CAS VI 15	1927			
Age/date	15-20	1973-8	10-15	1912-17			
W Coat	LWS		LWS				
Ridge	BC	D&S	FR				
Base coat	-						
Wired	Y		N				

We 07: No 9 (Willow Cottage), High Street

Grid Ref TL 60775187

C17 timber-framed cottage, with plaster render, ground floor and attic with a gabled eyebrow dormer window, and an axial red brick ridge.

Ref We07	Survey	1993					
Age/date	25-30	1963-8					
W Coat	LWS						
Ridge	BC	D&S					
Base coat	-						
Wired	Y						

We 08: No 40 High Street

Grid Ref TL 60625204

C18 timber-framed cottage with plaster render, formerly with a lobby entry, now blocked, and a single-flue ridge stack.

Ref We08	Survey	1993					
Age/date	15-20	1973-8					
W Coat	LWS						
Ridge	BC	D&S					
Base coat	-						
Wired	Y						

We 09: Nos 16 and 18 High Street

Grid Ref TL 60755194

Originally a late C17 row of three timber-framed cottages with plaster render, now two, the south-east elevation weatherboarded, ground floor and attic with three boxed dormers, and two painted brick ridge stacks of one flue each.

Ref We09	Survey	1993				
Age/date	15-20	1973-8				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 10: Bull Lane Cottage, Bull Lane

Grid Ref TL 60325233

Timber-framed cottage clad with plaster render and brick, built in two distinct phases, the earlier dated 1762, the later in the mid C19. The original 1762 plan was of three bays and a lobby entry, a ground floor and attic with a dormer. In the mid C19 the cottage was altered at the south-west end and subdivided, the roof was raised to allow for a full upper floor in a cross wing.

Ref We10	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

We 11: The Thatched Cottage, High Street

Grid Ref TL 60335231

Late C18 timber-framed cottage with plaster render, originally a pair now one dwelling, extended during the C19, of two storeys with a red brick stack, a contemporary out shut at the rear, now with two dormers in the roof, and lean-to additions at each end with pantiled roofs.

Ref We11	Survey 1993		CC 1950 Ywrh K5 21451			
Age/date	15-20	1973-8	15-20	1930-35		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-		Y			
Wired	Y		N			

WILLINGHAM Wi

Wi 01: Nos 11 & 13 (St Michael's Cottage), Green Street

Grid Ref TL 40804038

Mid C17 timber-framed cottage with plaster render now painted, ground-floor hall with attic with three dormers, and a C19 gault brick stack, and a jettied cross-wing with a C19 side stack, widened at its base for a bread oven, at the rear an addition with a mansard roof.

Ref Wi01	Survey	1993	CC Ywill K6 49166	1960		
Age/date	5-10	1983-8	20-25	1935-40		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	UD		
Base coat	-					
Wired	Y		Y			

Note: Extensive bird damage has occurred to the roof shown in the Cambridge Collections photograph, probably due to the wire not being repaired when neccessary.

Wi 02: No 29 (Church Farmhouse), Church Street

Grid Ref TL 40557053

C15 timber-framed cottage with additions of about 1670, rendered in pebbledash, a single range with a lobby entry and part of a C15 jettied cross-wing to the right which reuses smoke-blackened timber rafters, generally with a ground floor and attic, a half-hipped roof and a grey gault brick ridge stack.

Ref Wi02	Survey	1993	CAS V I	1930		
Age/date	20-25	1968-73	5-10	1920-25		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Note: The CAS photograph shows decoration applied to the 1930s roof in the form of a series of liggers in a diamond patten located along the flush ridge and a V-shaped pattern to the eaves.

Wi 03: No 38 High Street

Grid Ref TL 40267024

Late C18 timber-framed cottage, a single range with a lobby entry, ground floor and attic with two dormers and a gault brick axial stack. A floor brick is inscribed with the date 1807 which could possibly be the date of the cottage.

Ref Wi03	Survey 1993					
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Note: The last re-thatch was carried out by master thatcher Malcolm Dodson in the late 1970s or early '80s (DDSR).

Wi 04: No 60 High Street

Grid Ref TL 40207011

C17 timber-framed cottage, pebbledash, with a two-storeyed range with a kitchen wing, possibly an addition at the rear.

Ref Wi04	Survey 1993		CAS 1940 CAS Box 113/4			
Age/date	20-25	1968-73	10-15	1925-30		
W Coat	CWR		LWS			
Ridge	BC	D&S	BC	UD		
Base coat	-					
Wired	Y		N			

Wi 05: Nos 8, 10 and 12 Silver Street

Grid Ref TL 40617021

Late C17 house, now three cottages, constructed from narrow hand-thrown bricks with irregular bonding and broad mortar joints, of two storeys, with red brick end pilasters, end stacks, and a steeply pitched roof with plain brick eaves cornice and stepped end parapets on kneelers. The rear elevation has similar pilasters to the corners.

Ref Wi05	Survey	1993	NMRC Bdg Files 18607	1970	CAS V 3	1930
Age/date	20-25	1968-73	5-10	1960-65	10-15	1915-20
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	-					
Wired	Y		Y		N	

Note: In the NMRC 1970 photograph the eaves are secured by three lines of horizontal liggers.

WIMPOLE Wi

Wm 01: The Great Barn, Park Farm, (north-east of) Wimpole Hall

Grid Ref TL 34075140

Timber-framed barn with weatherboarding on a black brick plinth, built *circa* 1800 to the design of Sir John Soane, now restored. Eight bays with two midstreys on the south side, traditionally framed with jowled posts, braced tie-beams and queen-strut trusses with bracing struts to principle rafters. The barn forms one side of the farmyard and is one of a planned group of farm buildings built for the third earl of Hardwicke. Its roof was originally slated, but has been thatched in water reed for some time.

Ref Wm01	Survey	1993	CC Ywim K76 12442	1976		
Age/date	20-25	1968-73	5-10	1966-71		
W Coat	WR		WR			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: The ridge has been rethatched during the last ten years with sedge.

Wm 02: Loose boxes and stock sheds, Park Farm, Wimpole Hall

Grid Ref TL 34065137

Timber-framed loose boxes and stock sheds with weatherboarding and black brick plinth built *circa* 1800 to the design of Sir John Soane, now restored. The plan takes the form of an E, with a single-storeyed main range and wings with lofts for storage, each with a barge boarded gabled dormer, two with louvers and one with a pitched opening. A planned group of farm buildings, built for the third earl of Hardwicke.

Ref Wm02	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wm 03: Cart shed, Park Farm, Wimpole Hall

Grid Ref TL 34085144

Timber-framed cart shed with weatherboarding and black brick plinth and brick piers, built *circa* 1800 to a design by Sir John Soane, now restored. Nine bays divided by red brick piers, of one storey and a loft for storage with three barge-boarded gabled dormers. This is one of a planned group of farm buildings for the third earl of Hardwicke

Ref Wm03	Survey 1993					
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wm 04: Nos 137 & 139 (Sunnyside & Briar Cottages), Cambridge Rd

Grid Ref TL 33384872

C18 timber-framed cottage with roughcast render to the east elevation and cased in white brickwork to the front and west elevations, originally one dwelling now two, of two storeys, with a single gault brick chimney stack.

Ref Wm04	Survey 1993		NMRC 1977 Red Box BB 77 / 3792			
Age/date	15-20	1973-8	15-20	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Wm 05: No 135 Cambridge Road

Grid Ref TL 33414873

Early C19 white brick cottage with a lobby entry, ground floor and attic with two inserted gabled dormers and a ridge stack of two flues.

Ref Wm05	Survey	1993	CC BB 77 / 3793	1977		
Age/date	15-20	1973-8	15-20	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TWx3					
Wired	Y		N			

WRESTLINGWORTH (Bedfordshire) Wr

Wr 01: No 7 Water End, High Street

Grid Ref TL 25814710

C17 timber-framed cottage, with sand and cement render. Single range, ground floor and attic, with a single dormer window and central ridge stack, partly rendered, a smaller perpendicular C20 range

Ref Wr 01	Survey	1993				
Age/date	15	1978				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The current rethatch was carried by master thatcher D D Stanford in 1978 (DDSR).

WIMPOLE Wi

Wm 01: The Great Barn, Park Farm, (north-east of) Wimpole Hall

Grid Ref TL 34075140

Timber-framed barn with weatherboarding on a black brick plinth, built *circa* 1800 to the design of Sir John Soane, now restored. Eight bays with two midstreys on the south side, traditionally framed with jowled posts, braced tie-beams and queen-strut trusses with bracing struts to principle rafters. The barn forms one side of the farmyard and is one of a planned group of farm buildings built for the third earl of Hardwicke. Its roof was originally slated, but has been thatched in water reed for some time.

Ref Wm01	Survey	1993	CC Ywim K76 12442	1976		
Age/date	20-25	1968-73	5-10	1966-71		
W Coat	WR		WR			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: The ridge has been rethatched during the last ten years with sedge.

Wm 02: Loose boxes and stock sheds, Park Farm, Wimpole Hall

Grid Ref TL 34065137

Timber-framed loose boxes and stock sheds with weatherboarding and black brick plinth built *circa* 1800 to the design of Sir John Soane, now restored. The plan takes the form of an E, with a single-storeyed main range and wings with lofts for storage, each with a barge boarded gabled dormer, two with louvers and one with a pitched opening. A planned group of farm buildings, built for the third earl of Hardwicke.

Ref Wm02	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wm 03: Cart shed, Park Farm, Wimpole Hall

Grid Ref TL 34085144

Timber-framed cart shed with weatherboarding and black brick plinth and brick piers, built *circa* 1800 to a design by Sir John Soane, now restored. Nine bays divided by red brick piers, of one storey and a loft for storage with three barge-boarded gabled dormers. This is one of a planned group of farm buildings for the third earl of Hardwicke

Ref Wm03	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Wm 04: Nos 137 & 139 (Sunnyside & Briar Cottages), Cambridge Rd

Grid Ref TL 33384872

C18 timber-framed cottage with roughcast render to the east elevation and cased in white brickwork to the front and west elevations, originally one dwelling now two, of two storeys, with a single gault brick chimney stack.

Ref Wm04	Survey	1993	NMRC Red Box BB 77 / 3792	1977		
Age/date	15-20	1973-8	15-20	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		Y			

Wm 05: No 135 Cambridge Road

Grid Ref TL 33414873

Early C19 white brick cottage with a lobby entry, ground floor and attic with two inserted gabled dormers and a ridge stack of two flues.

Ref Wm05	Survey	1993	CC BB 77 / 3793	1977		
Age/date	15-20	1973-8	15-20	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TWx3					
Wired	Y		N			

WRESTLINGWORTH (Bedfordshire) Wr

Wr 01: No 7 Water End, High Street

Grid Ref TL 25814710

C17 timber-framed cottage, with sand and cement render. Single range, ground floor and attic, with a single dormer window and central ridge stack, partly rendered, a smaller perpendicular C20 range

Ref Wr 01	Survey	1993				
Age/date	15	1978				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TWx2					
Wired	Y					

Note: The current rethatch was carried by master thatcher D D Stanford in 1978 (DDSR).

WEST WICKHAM Ww

Ww 01: No 48 (Prospect Cottage) Streetly End

Grid Ref TL 61444811

Pair of late C17 timber-framed cottages, with plaster render, lobby-entry plan, ground floor and attic with two full gable dormers and a ridge stack. Typical side-purlin roof.

Ref Ww01	Survey	1993	NMRC Bdg Files 18585	1951	CAS VIII 5	1927
Age/date	15-20	1973-8	10-15	1936-41	20-25	1902-07
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		BC	UD
Base coat	-		Y			
Wired	Y		N		N	

Ww 02: No 36 Streetly End

Grid Ref TL 61534813

Early C18 timber-framed cottage, with external plaster render, two bays with an end entrance, and a small ridge stack.

Ref Ww02	Survey	1993	NMRC Bdg Files 18587	1951		
Age/date	20-25	1968-73	0-5	1946-51		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: Ridge in 1951 photo is decorated with three horizontal rows of liggers sparred down in a staggered arrangement.

Ww 03: No 41 (Orchard Cottage) Streetly End

Grid Ref TL 61584811

C18 timber-framed cottage, L-plan with a wing at the front and a thatched entrance porch in the angle, ground floor and attic, and a half-hipped roof.

Ref Ww03	Survey	1993	NMRC Red Box AA81/993	1951		
Age/date	20-25	1968-73	10-15	1936-41		
W Coat	WR		WR			
Ridge	BC	D&S	FR			
Base coat			Y			
Wired	Y		N			

Note: The ridge has been re-thatched during the last ten years with sedge.

Ww 04: No 34 (Streetly Cottage) Streetly End

Grid Ref TL 61544817

Originally a pair of early C18 timber-framed cottages, now one, of four bays, ground floor and attic with two eyebrow dormer windows, and a red brick ridge stack.

Ref Ww04	Survey	1993	NMRC Bdg Files 18588	1951		
Age/date	15-20	1973-8	5-10	1941-6		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		N			

Ww 05: Nos 44 and 46 (Beechview and Rose Cottage) Streetly End

Grid Ref TL 61464812

Originally an early C18 timber-framed cottage, with plaster render, now two dwellings, ground floor and attic with two gable dormers, and a ridge stack.

Ref Ww05	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat						
Wired	Y					

Ww 06: No 27 (Holly Cottage) High Street

Grid Ref TL 61444935

Early C17 timber-framed cottage with external plaster render, the front elevation of brick. Lobby-entry plan with a C18 wing, ground floor and attic with a moulded eaves cornice and three hipped dormers, and a ridge stack with its shafts set diagonally, and a C17 end stack.

Ref Ww06	Survey	1993				
Age/date	10-15	1978-83				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ww 07: No 91 High Street

Grid Ref TL 61884958

Early C18 timber-framed cottage, originally a pair, a single range of four bays, ground floor and attic with two eyebrow dormer windows and an axial ridge stack.

Ref Ww07	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ww 08: No 15 (Vicarage Cottage), Burton End

Grid Ref TL 62204969

C18 timber-framed cottage with plaster render, ground floor and attic with gault brick single-flue end stacks and a lean-to at each gable end.

Ref Ww08	Survey	1993	CAS VI 4	1929		
Age/date	10-15	1978-83	10-15	1914-19		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Note: There are signs of damage by birds to the gables of the roof. The photograph does not clearly show what cladding material was used around the dormer windows, although the survey showed that this area was roofed in clay tile in 1993, and this may have also been the case in 1929.

Ww 09: No 10 (The Old Vicarage), Balsham Road

Grid Ref TL 62274967

C17 timber-framed cottage with plaster render, altered and extended during the C19. Ground floor and attic with two C19 eyebrow dormer windows, and a large red brick chimney-stack towards the east end of the C17 part.

Ref Ww09	Survey	1993	CAS VI 2	1929		
Age/date	15-20	1973-8	5-10	1919-24		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat						
Wired	Y		N			

Ww 10: No 19 (Farthingales), High Street

Grid Ref TL 61384927

C17 timber-framed cottage with plaster render, ground floor and attic with two later eyebrow windows, and an original ridge stack and a later end stack to the north-west.

Ref Ww10	Survey	1993	CC YwickK81 25173	1981		
Age/date	15-20	1973-8	0	1981		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: The 1981 photograph shows the cottage in the final stages of re-thatch with a block cut ridge being applied. This must be the same thatching that appeared as much as 15-20 years old at the time of the 1993 survey.

Ww 11: Hill Thatch, High Street

Grid Ref TL 62064963

Late C17 timber-framed cottage with render, extended and renovated during the C20, ground floor and attic with two eyebrow dormers and a red brick ridge stack.

Ref Ww11	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ww 12: April Cottage, High Street

Grid Ref TL 62044960

C17 timber-framed cottage, extensively renovated, ground floor and attic with one eyebrow window, and a half hip to the north-east.

Ref Ww12	Survey	1993				
Age/date	10-15	1978-83				
W Coat	WR					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ww 13: Barn at Manor Farm, Balsham Road

Grid Ref TL 61274911

C17 timber-framed aisled barn, weatherboarded, now reduced to three bays with a midstrey opening on the north side.

Ref Ww13	Survey	1993	NMRC Bdg Files 18572	1951	CAS V 2	1927
Age/date	25-30	1963-8	0-5	1946-51	15-20	1907-12
W Coat	LWS		LWS		LWS	
Ridge	BC	D&S	FR		FR	
Base coat	-					
Wired	Y		N		N	

Note: The photograph of 1927 shows the roof with signs of slight slippage beginning. There is also an extensive growth of moss over the roof slopes.

Ww 14: Pond Meadow Barn, Balsham Road

Grid Ref TL 61274911

Early C17 timber-framed barn, weatherboarded, on a brick plinth, converted to a house in 1985 and given window openings and a brick chimney stack, four bays extended by half a bay and aisled. Typical wind-braced side-purlin roof.

Ref Ww14	Survey	1993	CAS VII 9	1927		
Age/date	25-30	1963-8	10-15	1912-17		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat						
Wired	Y		N			

Ww 15: Michaelmas Cottage, Streetly End

Grid Ref TL 61564818

C18 timber-framed cottage, originally a pair, of four bays, extended to the rear during C20, ground floor and attic with two gabled dormers.

Ref Ww15	Survey	1993	CC Ywick K6 48083	1960		
Age/date	20-25	1968-73	10-15	1945-50		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	-					
Wired	Y		Y			

Note: The eaves are decorated with a cross pattern formed in liggers.

Ww 16: No 49 (Trinity House) & No 51 (Old Farm Cottage) High Street

Grid Ref TL 61574951

Timber-framed cottage built over a long period. The rear range dates form the C16 with additions to the front and south-west from the C18 forming an L-plan, ground floor and attic, with two ridge stacks.

Ref Ww16	Survey 1993		CAS 1927 VI 5			
Age/date	15-20	1973-8	5-10	1917-22		
W Coat	WR		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ww 17: No 45 (Chequers Public House), Streetly End

Grid Ref TL 61554811

Formerly a house, now a public house, built during the C18, timber-framed with plaster render, re-clad during the C19, ground floor and attic with a window to the south-west and two brick ridge stacks.

Ref Ww17	Survey 1993		CC 1960 Ywick K6 48095 Ywick K79 19144		NMRC 1933 Red Box AA81/992	
Age/date	15-20	1973-8	15-20	1940-45	5-10	1923-8
W Coat	WR		LWS		LWS	
Ridge	BC	D&S	BC	UD	FR	
Base coat						
Wired	Y		N		N	

Ww 18: No 27 and 29 Burton End

Grid Ref TL 62354970

Originally a row of C17 timber-framed cottages, rendered, altered and remodelled in the C19. The east part consists of a ground floor and attic with two dormers, the west part of ground and first floors and attic with two gabled dormers.

Ref Ww18	Survey	1993	CAS VI 1	1929		
Age/date	5-10	1983-8	5-10	1919-24		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	-					
Wired	Y		N			

Ww 19: No 10 (Willow Cottage), High Street

Grid Ref TL 61364918

Late C17 timber-framed cottage with plaster render, a ground floor and attic with an eyebrow dormer window, and a half hipped roof with a square red brick ridge stack, and additions to the north-east end.

Ref Ww19	Survey	1993				
Age/date	10-15	1978-83				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

Ww 20: No 36 (Flowers Cottage), Streetly End

Grid Ref TL 61544803

Timber-framed cottage with plaster render, built in two district phases during the early C18, three-bay lobby-entry plan with a wing to the south-east, ground floor and attic with a gable dormer, a north-east wing was rebuilt after a fire.

Ref Ww20	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	-					
Wired	Y					

ADDENDUM : SMOKE-BLACKENED THATCH

Examples of houses with smoke-blackened thatch found in other parishes than those included within the main survey; all are in Cambridgeshire except where specifically stated otherwise.

By 01: Bythorn, Byfield Cottage

Grid Ref TL 05757585

Early C16 timber-framed hall-house, rendered, much altered and reduced in the C19, three-part plan with a central hall, once open to the roof, with smoke-blackened rafters, later floored over with an inserted stack, ground floor and attic with two eyebrow dormer windows, a C19 dairy at the rear.

Ref By01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer has survived and is smoke-blackened over the former hall. There is also soot encrustation on the roof timbers.

Hi 01: Histon, No 36 (Stone Coruer Cottage) Cottenham Road

Grid Ref TL 43656419

C14 timber-framed hall-house, plastered, with two-bay hall, now floored over with an inserted red brick chimney stack, two-storeyed end bays, hipped crown-post roof.

Ref Hi01	Survey	1993	NMRC Red Box Histon Photo B	1967		
Age/date	10-15	1978-83	5-10	1957-62		
W Coat	LWS		LWS			
Ridge	BC	D&S	BC	D&S		
Base coat	TW					
Wired	Y		N			

Note: The base layer is ancient and smoke-blackened, this is located in the left-hand bay. The central bay which would have contained a greater degree of smoke-blackening in the past was obviously disturbed when the chimney stack was inserted and there is now very little blackening apparent.

Ga 01: Great Abington , 109 High Street

Grid Ref TL 53194864

C15 timber-framed hall-house, rendered, converted into two cottages in C19 and given a rear extension, three-part plan with a central hall of two bays, once open to the roof, later floored over with an inserted stack.

Ref Ga01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer has survived and is smoke-blackened over the former hall with soot encrustation on the principal rafters and collars. It appears that successive re-thatches have been spar-coated, and therefore not requiring a total stripping of the roof, thus preserving the soot encrustation of the base layer. Last re-thatched by the firm of master thatchers Dodson Brothers in the mid 1970 (DDSR).

Ga 02: Great Abington , No 108 (The Old Farm), High Street

Grid Ref TL 53144832

C15 timber-framed hall-house, rendered, three-part plan with a central hall of two bays, once open to the roof, later floored over with an inserted stack to match the ground floor and attic of the ends, crown-post roof, smoke-blackened.

Ref Ga02	Survey	1993	NMRC Bdg Files 10019	1951		
Age/date	25-30	1963-8	10-15	1936-41		
W Coat	CWR		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The base layer has survived and is smoke-blackened over the former hall, successive re-thatches being spar coated.

Ga 03: Great Abington , No 82 (Gildencroft), High Street

Grid Ref TL 53194870

C15 timber-framed hall-house, plaster rendered, three-part plan with a central hall, once open to the roof, later floored over with an inserted stack to match the ground floor and attic of the storeyed ends, eyebrow dormers and ridge stack, partly smoke-blackened roof rafters.

Ref Ga03	Survey	1993				
Age/date	25-30	1963-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer has survived and is smoke-blackened over the former hall together with the timber roof members.

Gc 01: Great and Little Chishill, No 5 (Phytiles), The Pudgell

Grid Ref TL 42043894

Late C15 timber-framed hall-house, rendered, much altered and converted into four cottages, and now a single dwelling, three-part plan with a central two-bay hall, once open to the roof, with smoke-blackened collar-rafter roof, later floored over with an inserted stack, with probably floored end bays.

Ref Gc01	Survey	1993				
Age/date	15-20	1973-8				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer has survived and is smoke-blackened over the former hall together with the timber collars and roof rafters.

Gw 01: Great Wilbraham, No 63 (Whithorn), Church Street

Grid Ref TL 54805773

Mediaeval timber-framed aisled hall-house, dating from the C13 to the C14, of which two bays survive, and a further single bay rebuilt in the C16, and a later C17 addition. The hall has been floored over and a chimney-stack inserted into it.

Ref Gw01	Survey	1993				
Age/date	20-25	1968-73				
W Coat	LWS					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer is ancient and smoke-blackened over the two hall bays. This has been greatly disturbed by successive re-thatches, and unfortunately the greatest deposit of soot is on the timber collars of the roof.

Ha 02: Haslingfield, No 12 (Pates Farmhouse), Barton Road

Grid Ref TL 40355265

Small C16 timber-framed hall-house, rendered, extended in C17 and much altered, converted into four cottages and now a single dwelling once more, three-part plan with a central hall, once open to the roof, with smoke-blackened rafters, later floored over with an inserted stack.

Ref Ha02	Survey	1993				
Age/date	20-25	1968-73				
W Coat	CWR					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: The base layer has survived and is smoke-blackened over the former hall together with that structural timber members of the roof. The soot encrustation has been partly destroyed by the insertion of the brick chimney stack.

Hr 01: Harlton, No 40 (Dilleys), Eversden Road

Grid Ref TL 38355236

Timber-framed cottage, rendered, of four bays, partly of one storey originally open to the roof, partly one storey and attic with two dormers, the roof ridge at two levels, side-purlin roof, with apparently reused smoke-blackened timbers.

Ref Hr01	Survey	1993	CC Yhar K6 34924	1960		
Age/date	20-25	1968-73	10-15	1945-50		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The base layer is ancient and over the two originally open central bays it is smoke-blackened. The soot encrustation has been greatly destroyed by the insertion of the brick chimney stack. The smoke-blackened timbers appear to have been employed in a different building before this one. However what soot encrustation exists is apparent on both roof slopes running to the apex.

Ln 01: Linton, No 36 (Priors End), The Grip

Grid Ref TL 55924641

C15 timber-framed hall-house, rendered, once two cottages, much altered from the C16 onwards, and extended, partly a hall once open to the roof, partly of one floor and attic, the hall floored over with an inserted stack.

Ref Ln01	Survey	1993	CC Ylin K9 18199	1909		
Age/date	20-25	1968-73	15-20	1889-94		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The base layer is ancient and smoke-blackened over the former hall, and the existing roof rafters are sooted.

Ln 02: Linton, No 42 (Ditches Close), The Grip

Grid Ref TL 55904637

Late C15 timber-framed hall-house, rendered, once divided up into seven tenements, much altered and extended to form a U-plan, the hall once open to the roof, later floored over and sharing a stack with one of the two wings.

Ref Ln02	Survey	1993	NMRC Bdg File 14490	1957		
Age/date	15-20	1973-8	10-15	1942-7		
W Coat	LWS		LWS			
Ridge	BC	D&S	FR			
Base coat	TW					
Wired	Y		N			

Note: The base layer is smoke-blackened over the former hall as are the roof timbers. The original soot encrustation was disturbed by the insertion of the brick chimney stack. The 1957 photograph shows slippage of the thatch.

Sm 02: Seeple Morden, No 26 (North Brook End Cottage) North Brook End

Grid Ref TL28964419

Late C16 timber-framed cottage, part originally open to the roof, now with ground floor and attic, a ridge stack and an end stack.

Ref Sm02	Survey	1993				
Age/date	20-25	1968-73				
W Coat	WR					
Ridge	BC	D&S				
Base coat	TW					
Wired	Y					

Note: Despite the use of reed, the base layer is ancient and partly smoke-blackened. The soot encrustation exists in this example purely because, very unusually, the roof has never been totally stripped for re-thatching. There has however been a great deal of disturbance of the remaining thatch.