

# Dairy Farm Barn, Brightwell Street, Brightwell, Suffolk BGL 047

# **Historic Building Record**

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# Dairy Farm Barn, Brightwell Street, Brightwell, Suffolk

(TM 251 431)

## **Historic Building Record**

This report provides a written and photographic record at English Heritage (2006) Level 2 of a redundant barn. It has been prepared to a brief written by Suffolk County Council's Archaeological Service (Edward Martin, 23<sup>rd</sup> February 2010 ref. SpecHBR(EM)\_DairyFmBn\_Brightwell\_0464\_10), and is intended to inform and accompany a planning application for conversion (application reference C/10/0464).

### Introduction

The report is accompanied by a CD containing a photographic record in the form of 73 digital images (Appendix 1), but also includes 10 printed photographs of key features to illustrate the text (Appendix 2). Each image is described in a separate schedule and wherever possible includes a scale rod with half-metre divisions in red and white. The site was inspected on 22<sup>nd</sup> April 2010.

## **Summary**

Dairy Farm Barn lies in open countryside to the east of Brightwell Street, approximately 500 metres south of the parish church and the former site of Brightwell Hall. The hall was demolished in the mid-18<sup>th</sup> century and by 1806 both the Hall and Diary Farms belonged to Sir John Kenward Shaw of Eltham Lodge in Kent. A sketch plan of that year shows Dairy Farm as a large tenanted holding of 143 acres, and outlines a barn on approximately the same site as the existing structure.

The barn is a timber-framed and weatherboarded threshing barn of five bays with a central entrance in its southern elevation facing the former farmhouse (which is ostensibly a reconstruction of circa 1920). It contains an intact and impressive roof of staggered buttpurlins and combines both arch-braces and knee-braces in the typical manner of the early-19<sup>th</sup> century. The framing is of high quality, reflecting its construction for a gentry estate, and the building represents a good 'Napoleonic' barn which illustrates Suffolk's agricultural boom in the wake of wartime import restrictions and high cereal prices: It is accordingly of both historic and structural interest. The barn's traditional appearance and conspicuous location in the landscape, overlooking a valley to the north, provides additional local significance. Despite its relatively early origin, however, the building has probably been too heavily altered to meet the strict English Heritage criteria for listing, although the case is marginal: the loss of its original thatch and porch is relevant in this respect, together with the insertion of several additional doors into its wall fabric. The rest of the farm complex dates only from the 20<sup>th</sup> century, including several lean-to sheds, a milking parlour and a covered cattle yard of circa 1920, and while its buildings form a typical and picturesque group they are not in themselves of special historic interest.

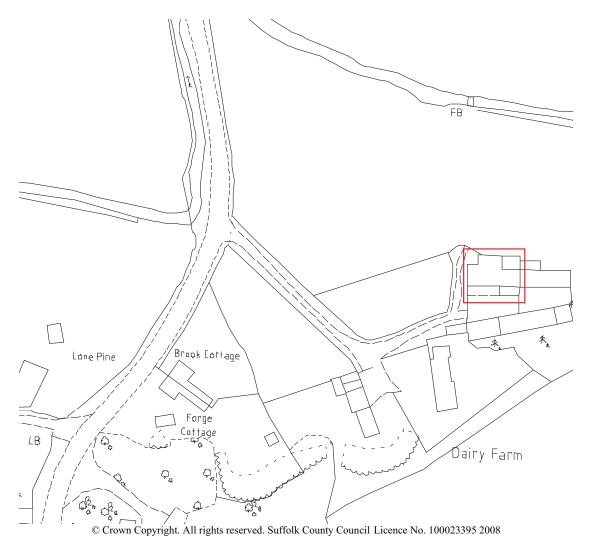


Figure 1
Current Ordnance Survey Site Plan
Outlining the barn and attached structures in red, and showing Brightwell Street to the left. See figure 6 below for a more detailed breakdown of the historic buildings.

## **Historic Context: Documentary & Cartographic Record**

Dairy Farm lies in open countryside to the east of Brightwell Street, approximately 500 m south of the parish church and the site of Brightwell Hall. Brightwell is an unusually small parish which contained just 850 acres at the beginning of the 19<sup>th</sup> century when both the Hall and Diary Farms belonged to Sir John Kenward Shaw of Eltham Lodge in Kent (the sixth baronet, who served as a Captain in the Royal Navy). Brightwell Hall had been rebuilt on a grand scale in 1663 by Sir Thomas Barnardiston but was largely demolished in *circa* 1760 with the exception of a portion occupied by a farmer (White's Directory of Suffolk, 1844). The present hall appears to be a modern brick house, and the church is the only listed building in the entire parish. Brightwell also lacks a tithe map as the tithes had previously been 'merged' and were owned in part by Sir Robert Harland of Orwell Park and by a member of the Cobbold family. A sketch plan of Dairy Farm dated 27<sup>th</sup> November 1806 survives in the Ipswich Record Office however, and shows a substantial tenanted holding of 143.5 acres occupied by one Sarah Cooper (figure 2). White's Directory names the tenant of 'Derry Farm' as Thomas Garrod in 1844, when it was owned by the seventh baronet (also called Sir John Kenward Shaw).

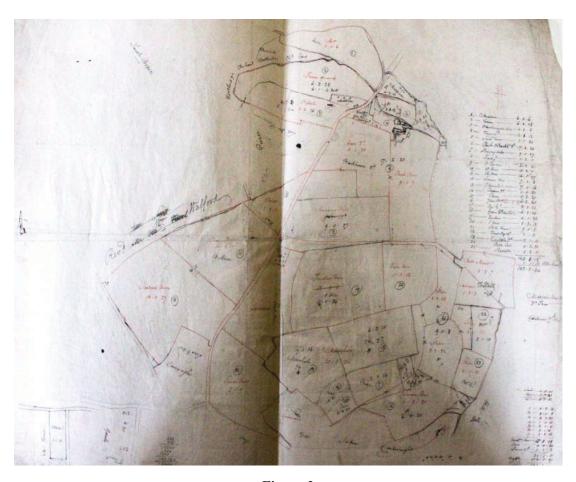


Figure 2
Plan of Dairy Farm dated November 27<sup>th</sup> 1806 (Suffolk Record Office ref. HD 475/279), showing the farm house and yard at top-right and the farmland to the south

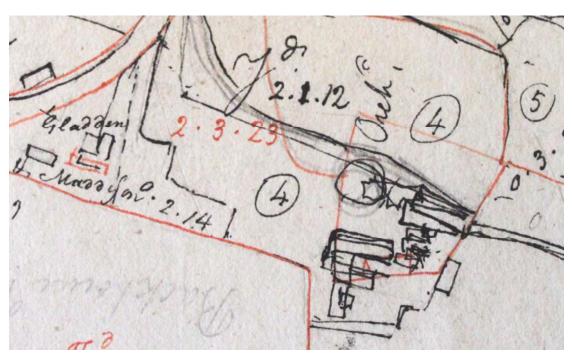
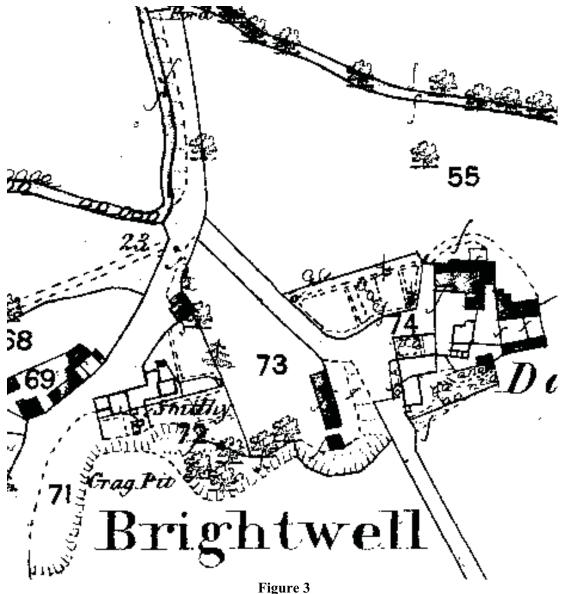


Figure 2a

Detail of the 1806 sketch plan, showing the L-shaped farmhouse to the south-west of the barn. This barn may represent an earlier structure on the site of the present barn.



First Edition 25 inch Ordnance Survey of 1881.

The L-shaped farmhouse remains as shown in 1806 (figure 2), and the barn has much the same outline but appears to lie slightly further to the west. It is unclear whether the yard complex to the east of the site was depicted on the earlier sketch or replaced another building in a similar location. The ford is shown to the north.

The 1806 plan includes a rough outline of the house and farm buildings, and names the adjoining fields to the north east as Wheelwrights Hill and Sink Fenn respectively. The site of the farm is described only as 'farm yard'. The farmhouse is depicted with an L-shaped outline and lies to the south and south-west of two large outbuildings – both of which could be interpreted as barns with central southern porches. A smaller outbuilding lies to the east of the house. A very similar situation is shown more clearly on the first edition Ordnance Survey of 1881 (figure 3), when the present barn was undoubtedly in existence, and it is possible that little had changed since 1806. If the barn was present in 1806 it would have been newly built. By 1904 the second group of buildings to the east of the yard had been demolished, and the outline of the barn modified (figure 4). The existing milking parlour which adjoins the barn's eastern gable was shown for the first time in 1927 (figure 5) together with the open cattle shed to the south and the brick dairy immediately north of the house. The latter had also changed shape and may well have been entirely rebuilt as part of the major refurbishment of the site in *circa* 1920 (which date would be consistent with its current external appearance).

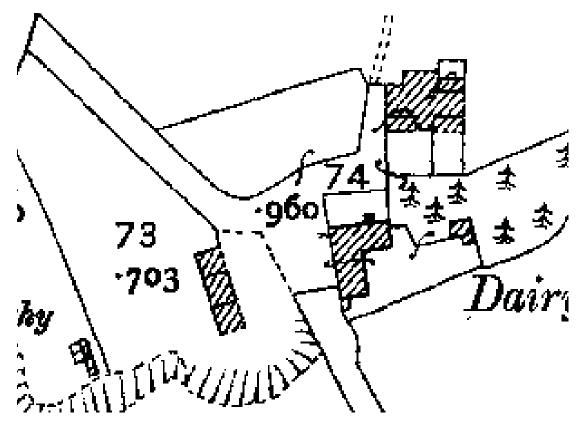


Figure 4

Second Edition 25 inch Ordnance Survey of 1904, showing the farm group in more detail. The L-shaped farmhouse remains as in 1806 but the outline of the barn had changed since 1881, having apparently acquired the present northern lean-to (area 2 in figure 6) but lost a southern projection. The separate group of buildings to the southeast as shown in 1881 had been demolished.

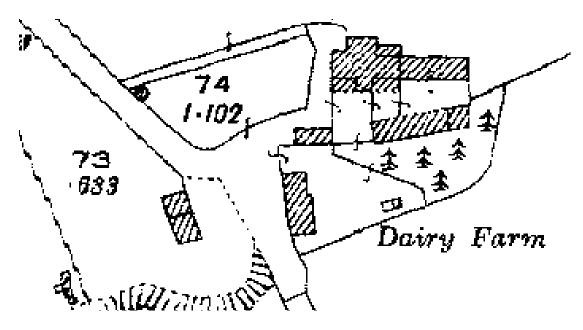


Figure 5

Third Edition 25 inch Ordnance Survey of 1927, showing the farm buildings much as they remain today. The outline of the house had altered since 1904 and it may have been entirely rebuilt. The barn appears to contain a central southern porch flanked by open-sided shelter sheds.

# **Building Analysis**

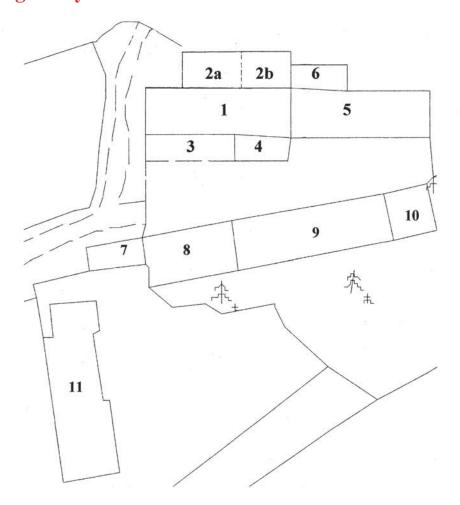


Figure 5

Block Plan of site, identifying each historic building with a number for ease of reference in the text and photographic record. Based on current Ordnance Survey.

## Key

- 1. Early-19<sup>th</sup> century timber-framed and weatherboarded threshing barn of five bays. Staggered butt-purlin roof with a combination of arched-braced tie-beams flanking the central bay and bolted knee-braces elsewhere (typical of 'Napoleonic' Suffolk barns). Originally with full-height doors to front and rear (one of which probably adjoined a missing porch) but the northern door reduced in size during the later 19<sup>th</sup> century. Formerly thatched but now covered with corrugated iron.
- 2. 20<sup>th</sup> century lean-to shed on site of two smaller sheds shown on late-19<sup>th</sup> century maps. The western section (2a) with a lower floor level and incorporating part of a gault brick threshing floor (probably surviving from an otherwise demolished 19<sup>th</sup> century lean-to porch).
- 3. 20<sup>th</sup> century open-sided pantiled lean-to cattle shelter with hay rack attached to southern elevation of barn. *Circa* 1930.
- 4. 20<sup>th</sup> century pantiled lean-to loose boxes. *Circa* 1930.

- 5. Early-20<sup>th</sup> century boarded and pantiled milking parlour retaining some original boarded stalls and a concrete manger. *Circa* 1920.
- 6. Mid-20<sup>th</sup> century boarded lean-to shed with evidence of boarded grain or feed bins.
- 7. Early-20<sup>th</sup> century single-storied brick and pantiled shed at entrance to yard. Divided into two compartments with shelving, cupboards and the remains of a chimney. Probably a dairy and cowman's shed.
- 8. Mid-20<sup>th</sup> century open-sided cattle shelter with single-pitch corrugated iron roof.
- 9. Large early-20<sup>th</sup> century boarded covered cattle yard with curved corrugated iron roof. *Circa* 1920.
- 10. Early-20<sup>th</sup> century boarded lean-to bullock shed against eastern gable of covered cattle vard.
- 11. Farmhouse. Probably *circa* 1920 on site of previous L-shaped house shown on earlier maps.
- N.B. The group of buildings described above forms a good example of an East Anglian farm complex, but the 20<sup>th</sup> century additions are not of special historic interest in themselves and only the 19<sup>th</sup> century barn is discussed in more detail below. However the ancillary structures are recorded photographically in Appendix 1.

## The Main Barn (1)

### **Structure and Date**

Dairy Farm Barn is a timber-framed and weatherboarded structure in five bays on an eastwest axis which extends to 18.3 m in length by 6.2 m in overall width (60 ft by 20.25 ft). Its walls rise to 4 m at their roof-plates (13 ft) including a red-brick plinth of 45 cm in height (18 ins) and contain diagonal 'primary' braces which interrupt the uniform vertical studs but are themselves pegged and tenoned to the storey posts and ground sills. The storey posts are not jowled but those which flank the central threshing bay are linked to their tie-beams by pegged and tenoned arch-braces in the medieval tradition (although only those of the northern elevation now survive); the open trusses between the outer bays were instead provided with bolted knee-braces from the outset. Knee-braces gradually superseded arch-braces during the first quarter of the 19<sup>th</sup> century, and the transitional combination of both types in this manner is characteristic of the many barns built in Suffolk between 1790 and 1820 to exploit the high grain prices of the Napoleonic wars. The wall framing and the impressive roof structure of staggered butt-purlins, which remains completely intact, are typical of the same period, particularly on the larger estates of eastern Suffolk. The barn may have been depicted on the farm plan of 1806 (figure 2), in which case it would have been newly built, or may represent a slightly later reconstruction on the site of its predecessor: the plan is too imprecise to be certain. The steep pitch of the roof (at approximately 60 degrees) and the presence of numerous thatch battens demonstrate that it was designed for thatch instead of its existing covering of corrugated iron.

### **Original Layout**

The barn is a standard threshing barn of its period with opposing entrances in its central bay. The existing southern entrance is an original feature, but the small door of the northern

elevation represents a later alteration: the framing of the northern bay is of smaller scantling than elsewhere and is secured by a secondary wall-plate (beneath the roof-plate) having been inserted in the mid- or late-19<sup>th</sup> century. The brickwork of the plinth also differs from that elsewhere in the barn and the ground sills are interrupted. Opposing full-height doors are rare before the mid-19<sup>th</sup> century, when, ironically, smaller rear doors such as the existing northern example were the norm (designed to create a through-draught for winnowing but not as vehicle thoroughfares): it therefore seems likely that one of the openings originally abutted either a gabled or lean-to porch. The outline of a wide northern porch is shown on the Ordnance Survey of 1904 and its existing 20<sup>th</sup> century replacement preserves part of a gault (white) brick threshing floor adjoining the relevant central bay (threshing floors usually extended into porches in this way).

#### Alterations

The barn remains largely intact despite the loss of its probable northern porch and the blocking of its adjoining doorway. A new porch may have been added to the south at the same time (as shown on the Ordnance Survey of 1904) and two additional doors were inserted in the southern elevation to link the barn with its flanking shelter sheds (as also shown in 1904). A similar door was inserted into the western gable at the same time – probably as part of the major refurbishment of the site between 1881 and 1904 – but the larger doors found in both gables are later features. Many local barns were altered in this way during the 19<sup>th</sup> century as they were converted from threshing barns to granaries and feed mills; the presence of horizontal rails at both ends of the northern elevation suggests the sometime presence of milling floors. Any evidence of a central threshing floor has been obscured by the modern concrete floor, which probably lies at least 30 cm above the original level (indicated by the brick floor of the northern lean-to). The barn has lost its thatch but retains a good deal of its original weatherboarding within its secondary lean-to sheds; this retains grey pigment beneath its later whitewash – a common treatment before the arrival of cheap tar as a by-product of town gas production in the late-19<sup>th</sup> century.

#### **Historic Significance**

Dairy Farm Barn is a good early-19<sup>th</sup> century 'Napoleonic' barn which reflects Suffolk's contemporary agricultural boom in the wake of high cereal prices resulting from wartime import restrictions. Its quality reflects its link to a gentry estate. The roof is a particularly impressive example of its type, and the building is accordingly of both historic and structural interest. Its conspicuous location in the landscape, overlooking a valley to the north, and picturesque traditional appearance provides additional local significance. Despite its relatively early origin, however, the building has probably been too heavily altered to meet the strict English Heritage criteria for listing, although the case is marginal: the loss of its thatch and original porch is relevant in this respect, together with the insertion of several additional doors into its historic fabric. The remaining buildings on the site are not of particular historic interest, although the covered cattle yard of *circa* 1920 with a curved corrugated iron roof is an early example of its kind.

## Appendix 1 (on accompanying CD): Full Photographic Record

#### **Descriptions of Photographs in Appendix 1**

### Photograph no.

- 1. General view of site from north-east showing barn (1) to right and milking parlour (5) to left.
- 2. General view of site from west showing farmhouse (11) to right and barn (1) to left.
- 3. General view of site from south-west showing proximity of barn to Brightwell Hall in rear.
- 4. Entrance to farm complex from west showing barn (1) to left and railway carriage shed to right.
- 5. Western yard wall from north showing barn (1) to left with dairy shed (7) & farmhouse (11) to right.
- 6. Exterior of dairy shed (7) from north-west showing yard entrance to left.
- 7. Western external gable of barn (1) showing steeply pitched roof and 20th century entrance door.
- 8. Interior of western compartment of dairy (7) from north showing remains of corner chimney to right.
- 9. Interior of western compartment of dairy (7) from south showing northern door and wall cupboards.
- 10. Exterior of railway carriage shed from north-west, showing house (11) to right and dairy (7) to left.
- 11. Farm yard from west showing barn (1) to left and cattle shed (9) to right.
- 12. Exterior of barn (1) from south showing shelter shed (3) in foreground.
- 13. Exterior of barn (1) from south-east showing loose boxes (4) in foreground and milking parlour (5) to right.
- 14. Exterior of milking parlour (5) from south showing barn (1) to left.
- 15. Farm yard from east showing barn (1) to right and cattle shed (9) to left.
- 16. Exterior of milking parlour (5) from east showing barn (1) in rear.
- 17. Exterior of barn (1) from north-east showing milking parlour (5) to left and lean-to sheds (6 & 2) to right.
- 18. Exterior of lean-to granary/feed store (6) from north-east.

- 19. Northern exterior of lean-to shed (2) from north-west showing doors opposite threshing floor.
- 20. Exterior of barn (1) from north-west showing lean-to shed (2) to left.
- 21. Exterior of cattle shed (9) from north-east showing lean-to shed (10) to left.
- 22. Exterior of cattle shed (9) from north-west.
- 23. Interior of lean-to shed (10) from north showing cattle shed (9) to right.
- 24. Interior of early-20th century cattle shed (or covered cattle yard) from west showing corrugated iron roof construction.
- 25. Exterior of shelter shed (8) from north showing cattle shed (9) to left.
- 26. Interior of shelter shed (8) from east showing brick gable of dairy shed (7).
- 27. Interior of lean-to shelter shed (3) from west showing principal entrance to barn (1) to left and loose boxes (4) to right.
- 28. Interior of lean-to shelter shed (3) from east showing hay rack attached to barn (1) to right.
- 29. Hay rack at western end of southern elevation of barn (1) showing secondary entrance door to right.
- 30. Principal entrance in southern exterior of barn (1) showing loose boxes (4) to right.
- 31. Western end of barn's southern exterior showing principal and secondary doors with grey pigment to weatherboarding.
- 32. Detail of brick plinth in Flemish bond to southern external elevation of barn (1).
- 33. Detail of tarred 19th century weatherboarding to southern exterior of barn (1) within lean-to shelter shed (3).
- 34. Internal eastern gable of lean-to loose boxes (4).
- 35. Interior of eastern loose box (4) showing door in southern exterior of barn (1).
- 36. Interior of loose boxes (4) from east showing internal partition.
- 37. 20<sup>th</sup> century roof structure of lean-to loose boxes (4) from east.
- 38. Internal western gable of loose boxes (4) showing door to shelter shed (3) to left.
- 39. Interior of loose boxes (4) from south-east showing door to barn and internal partition.
- 40. Interior of 20th century milking parlour from east showing stalls and concrete feeding troughs to right.

- 41. Interior of 20th century milking parlour from west showing stalls and concrete feeding troughs to left.
- 42. Internal north-eastern corner of milking parlour (5) showing boarded cattle stalls to left.
- 43. Internal western gable of milking parlour (5) showing doors to barn (left) and granary (6).
- 44. Interior of granary shed (6) from lean-to adjoining barn to west (2). Note bin grooves attached to door jambs.
- 45. Desiccated cat on floor of milking parlour (5) adjacent to granary door (6).
- 46. Detail of desiccated cat on floor of milking parlour (5) adjacent to granary door (6).
- 47. Interior of lean-to shed (2) from east showing step between sections 2b and 2a.
- 48. Interior of lean-to shed (2) from east showing whitewashed section of barn and door in threshing bay.
- 49. Internal western gable of lean-to shed (2) showing barn (1) to left.
- 50. External northern elevation of barn from north-west showing secondary door to lean-to (2).
- 51. Detail from north of brick threshing floor in lean-to shed (2) with secondary door to barn (1) in rear.
- 52. Threshing floor in lean-to shed (2) seen from west.
- 53. Detail from north of step and change of plinth between lean-to sections 2a to right and 2b to left.
- 54. Detail of secondary brick plinth (in English bond) to west of door in northern elevation of barn (1).
- 55. Interior of barn (1) from east showing 20th century concrete stalls to right.
- 56. Original roof structure of barn (1) from east showing arch-braces flanking threshing bay to right & knee-braces elsewhere.
- 57. Western end of intact staggered butt-purlin roof structure seen from south. Note thatch battens.
- 58. Roof structure of barn (1) from west showing mortises for missing arch-braces flanking threshing bay to right.
- 59. Roof structure of barn (1) from south-west showing central arch-braces between original knee-braces of outer bays.
- 60. Interior of barn from west showing southern entrance to right.
- 61. Internal western gable of barn (1) showing two secondary doors.

- 62. Western end of northern interior of barn (1) showing horizontal rail to left.
- 63. Central bay of northern interior of barn (1) showing secondary framing with narrow door to lean-to shed (2).
- 64. Detail of narrow secondary framing in central northern bay of barn (1) blocking original principal entrance.
- 65. Eastern bays of northern internal elevation of barn (1).
- 66. Internal eastern gable of barn (1) showing junction with milking parlour (5).
- 67. Eastern bays of southern internal elevation of barn (1) showing entrance to loose boxes (4) to left.
- 68. Central entrance of southern internal elevation of barn (1).
- 69. Detail of roof-plate above southern entrance of barn showing absence of stud mortises.
- 70. Western bays of southern internal elevation showing secondary door to left.
- 71. Detail of pegged and tenoned junction between typical primary wall brace and storey post of barn (1).
- 72. Detail of ground sill of barn (1) showing typical pegged and tenoned junctions with primary wall braces.
- 73. Central bay of northern interior of barn (1) showing ground sill to left respecting original barn door in this bay (now blocked).

## Appendix 2 (pp. 13-17): Selected Printed Photographs



Illus. 1. General view of site from north-east showing the early-19<sup>th</sup> century barn (1) to right with late-19<sup>th</sup> century lean-to sheds (2 & 6) and early-20<sup>th</sup> century pantiled milking parlour (5) in centre. The cattle shed (9) is visible in the rear.



Illus. 2. General view of site from west showing farmhouse (11) to right and barn (1) to left. The house was ostensibly rebuilt in *circa* 1920 but occupies the site of a predecessor shown on 19<sup>th</sup> century maps and may contain earlier fabric.



Illus. 3. Exterior of barn (1) from south showing the 20<sup>th</sup> century shelter shed (3) to left and the enclosed 20<sup>th</sup> century loose boxes (4) to right. The Ordnance Survey of 1927 appears to show a central porch flanked by open shelter sheds here.



Illus. 4. The western end of the barn's southern external elevation within the 20<sup>th</sup> century lean-to shelter shed (3), showing the principal entrance to right and a secondary door to the left. Note the 20<sup>th</sup> century hay rack for cattle and the grey pigment to the apparently original weatherboarding



Illus. 5. Interior of early-20th century milking parlour (5) from west showing the original wooden stalls and secondary concrete feeding trough to left.



Illus. 6. Original roof structure of barn (1) seen from the east and showing the archbraces to the tie-beams flanking the central threshing bay combined with bolted kneebraces to the outer trusses. The arch-braces to the south (left) have been removed.



Illus. 7. Interior of barn (1) from west showing southern entrance to right and archbraces of threshing bay to left. Note the empty mortises in the tie-beams for the missing southern braces and the inserted cement-block loose boxes for pigs or calves.



Illus. 8. The intact and impressive staggered butt-purlin roof structure of the barn (1) seen from the south-west and showing the central arch-braces between the original knee-braces of the outer bays. Note the surviving thatch battens beneath the 20<sup>th</sup> century corrugated iron.



Illus. 9. Central bay of northern internal elevation of barn (1) showing the narrow, secondary timbers of the late-19<sup>th</sup> century which block the original full-height doorway in this position (matching that to the south). The original ground sill to the left terminates at the storey post.



Illus. 10. Detail from north of the brick threshing floor in the lean-to shed (2) with the secondary door in the barn's central bay to the rear.