THE CAMBRIDGE REGION
THE

CAMBRIDGE REGION

EDITED BY

H. C. DARBY

Ehrman Fellow of King's College, Cambridge, and Lecturer in Geography in the University

CAMBRIDGE
AT THE UNIVERSITY PRESS
1938
This is an extream pleasant open Country, and a place of such Variety and Plenty, that fruitful Ceres with a smiling Countenance, invites the Industrious Peasant to behold with Joy the Fruits of his Labour, whilst she crowns his Industry with a plentiful Harvest; and as if the Earth strove not to be behind-hand with him in conferring other Largesses, she in divers places makes some Annual Additions of another Crop, by adorning the Fields with large Productions of Saffron, by which great Profits do continually arise: Besides, here it is that the green Banks of murmuring Rivers, and sunny Hills bedeck’d with diversity of Plants and Simples, call forth the Students from their musing Cells, and teach them Theory as well as Practice, by diving into their Natures, contemplating their Signatures, and considering their Qualities and various Effects. In a word, here is nothing wanting for Profit or Delight; and though the Northern parts of the County towards the Isle of Ely, lying somewhat low, are moist and Fenny, yet that Defect is abundantly supply’d by the Plenty of Cattle, Fish, and Fowl bred in those Fens, and which makes the Air more healthy, the gentle Gales which are frequently stirring, drive away all thick Mists and Fogs which in some parts most annoy it, and by this means it is become a fit Seat for the Muses to inhabit, and we have no reason to complain of the Soil, since our Wise Ancestors thought it good and convenient to plant a Colony of Learned Men here, and place one of the Eyes of our Nation in this spot of Ground, the famous and most glorious University of Cambridge, which we could not in Honour pass by without a Visit.

PREFACE

This survey of the district around Cambridge is written mainly in terms of the two administrative counties of Cambridge and the Isle of Ely. For, despite many disadvantages, a county is a convenient unit to consider—if only for statistical and historical reasons. The boundaries of these two units in Cambridgeshire include two types of country:

(1) The Upland, comprising both clay and chalk country. To this area some measure of cohesion is given by the valley of the Cam and its tributaries (see Fig. 3).

(2) The Fenland, marked by a contrast between the peat and silt areas, and including the fen islands (see Fig. 47).

Where necessary, we have not hesitated to extend discussion beyond the limits of the county boundaries. This is particularly true of the two chapters on the Fenland, for the problems of the Cambridgeshire fens cannot be discussed apart from wider considerations.

Finally, there is a third type of country—the Breckland—with a marked individuality; this comes within the county boundary only just west of the River Kennett. Chapter XV, however, is concerned with the Breckland as a whole—an area that lies almost entirely outside the county. Despite its artificial basis, this selection of material has the advantage of including the three types of country within easy access of the town of Cambridge itself (see Fig. 56).

The survey was prepared, in the first instance, for the Cambridge Meeting (1938) of the British Association for the Advancement of Science, and was presented by the Syndics of the University Press to members attending the Meeting. Its preparation was made possible by the kindness of thirty-four contributors, some of whom are indebted to the Editor of the Victoria County Histories (Mr L. F. Salzman) for the use of material assembled for the forthcoming volumes on Cambridgeshire; that indebtedness is specifically acknowledged on the relevant pages below. Most of the maps were drawn by Mr L. D. Lambert; others by Mr D. Baldwin and Mr E. A. Ashman. Permissions to reproduce the material on the maps are acknowledged on p. xiii. The courtesy of many people in the county who have helped in various ways must also be remembered; likewise, the efficiency of the printers who cheerfully endured many things.

H. C. DARBY

KING’S COLLEGE
CAMBRIDGE
Lammas Day 1938
CONTENTS

Chapter I. The Geology and Physiography of the Cambridge District  page 1

Chapter II. The Soils of Cambridgeshire  25
By H. H. Nicholson, M.A., and F. Hanley, M.A.

Chapter III. The Climate of Cambridgeshire  31
By A. S. Watt, Ph.D.

Chapter IV. The Botany of Cambridgeshire  44
By H. Godwin, M.A., Ph.D.

Chapter V. The Zoology of Cambridgeshire  60

Chapter VI. The Archaeology of Cambridgeshire  80
Edited by J. G. D. Clark, M.A., Ph.D. (with contributions by J. G. D. Clark, T. C. Lethbridge, and C. W. Phillips)

Chapter VII. The Place-Names of Cambridgeshire  99
By P. H. Reaney, Litt.d., Ph.D.

Chapter VIII. The Villages of Cambridgeshire  106
By John Jones

Chapter IX. Cambridgeshire in the Nineteenth Century  116
By H. C. Darby, M.A., Ph.D.

Chapter X. The Agriculture of Cambridgeshire  135
By R. McG. Carslaw, M.A., Ph.D., and J. A. McMillan, B.Sc.
Contents

Chapter XI. The Industries of Cambridgeshire  
By F. M. Page, M.A., Ph.D.  
Page 154

Chapter XII. The Growth of Cambridge  
By J. B. Mitchell, M.A.  
162

Chapter XIII. The Draining of the Fens: A.D. 1660-1850  
By H. C. Darby, M.A., Ph.D.  
181

Chapter XIV. Modern Drainage Problems: A.D. 1850-1938  
194

Chapter XV. The Breckland  
By R. R. Clarke, B.A., J. Macdonald, B.Sc., and A. S. Watt, Ph.D.  
208

Index of Place-Names  
231
MAPS AND DIAGRAMS

1. The Relief of Cambridgeshire and the surrounding country  page 3
2. Depth of the Palaeozoic Floor in feet below O.D.  5
3. The River System of southern Cambridgeshire  8
4. The Solid Geology of southern Cambridgeshire  9
5. Diagrammatic Composite Section of the Terraces around Cambridge  16
6. Post-Glacial Deposits of the Fenland  19
7. Fenland Waterways (Existing and Extinct)  21
8. Relief Map of south-east Cambridgeshire showing Water Table contours subsequent to the drought of 1934–35  22
9. Water Table: Section along a line running north-west from Balsham  23
11. Mean monthly temperatures at Valentia, Cambridge, Berlin and Orenburg  33
12. Mean monthly extremes of temperature at Valentia, Cambridge and Berlin  34
13. Mean monthly rainfall at Valentia, Cambridge, Berlin and Orenburg  37
14. Mean monthly relative humidity at Valentia, Cambridge and Berlin  38
15. Average number of hours of bright sunshine per day at Valentia, Cambridge and Berlin  42
16. Vegetation Successions at Wicken Fen  46
17. Cambridgeshire: Domesday Woodland  53
18. Cambridgeshire: Bronze Age Settlement  85
19. Cambridgeshire: Early Iron Age Settlement  89
20. Cambridgeshire: Romano-British Settlement  91
21. Cambridgeshire: Dark Ages Settlement  95
22. Cambridgeshire: Domesday Settlements  97
23. Cambridgeshire: Modern Settlements  107
24. Villages to the east of Cambridge  108
25. Villages to the west of Cambridge  110
26. Cambridgeshire: Parish Boundaries  113
27. Cambridgeshire: Building materials used in churches  115
28. Land Utilisation in Cambridgeshire about A.D. 1800  118
Maps and Diagrams

29. Cambridgeshire: Surface Geology

30. Population Changes in three rural hundreds of Cambridgeshire, 1801–1931

31. Population Changes in Cambridgeshire (including the Isle of Ely), 1801–1931

32. Cambridgeshire: Railways

33. Acres of Main Crops, 1913–37

34. Cambridgeshire: Potatoes

35. Cambridgeshire: Sugar Beet

36. Main Live Stock, 1913–37

37. The Cambridge Area: Relief

38. The Cambridge Area: Drift Geology

39. The Growth of Cambridge

40. Matriculations in the University of Cambridge, 1550–1935

41. The Population of Cambridge, 1801–1931

42. The Population of two central Cambridge parishes, 1801–1931

43. The Population of the parish of St Andrew the Less, 1801–1931

44. The Population of Cherryhinton, Chesterton, Trumpington, 1801–1931


46. Cambridge: Extensions of the Borough

47. The Fenland: to show the extent of the Bedford Level

48. The southern Fenland: to show the main drains

49. Seven Holes Sluice and Hermitage Sluice

50. Tidal Curves for the Great Ouse Outfall: Spring Tides, June 21st, 1935

51. Tidal Curves for the Great Ouse Outfall: Neap Tides, July 9th, 1935

52. The Sluices near Denver

53. Reclamation around the Wash

54. The Approaches to King’s Lynn, 1871

55. The Approaches to King’s Lynn, 1936

56. The Location of the Breckland

57. Breckland: 1934

58. Field System at West Wreatham (Norfolk), 1741
ACKNOWLEDGMENTS

We are indebted for the following permissions:

For Figs. 1, 2, 3, 8, 23, 24, 25, 26, 34, 35, 37, 39, 49 and 52 to the Controller of H.M. Stationery Office and the Director General of the Ordnance Survey.

For Figs. 4, 29 and 38 and portions of Figs. 18, 19, 20, 21, 47, 48 and 56 to the Controller of H.M. Stationery Office and the Director of the Geological Survey.

For Figs. 54 and 55 (reproduced from British Admiralty Charts, nos. 1177 and 108) to the Controller of H.M. Stationery Office and the Hydrographer of the Navy.

For the information on Figs. 33 and 36 to the Ministry of Agriculture and Fisheries.

For Fig. 7 to Major Gordon Fowler and the Editor of the Geographical Journal.

For Fig. 16 to the Editor of the Journal of Ecology.

For Figs. 17 and 22 to the Editor of the Proceedings of the Cambridge Antiquarian Society.

For access to the information on Figs. 30 and 31 to the Editor of the Victoria County Histories.

For Fig. 32 to Mr J. H. Wardley.

For Fig. 40 to Dr J. A. Venn.

For Fig. 46 to Mr W. P. Spalding.

For Figs. 50 and 51 to the Chief Engineer of the River Great Ouse Catchment Board.

For Fig. 57 to the Land Utilisation Survey.

For Fig 58 to the Editor of Economic History.

H. C. D.