British Plant Communities

VOLUME I

WOODLANDS AND SCRUB

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for the
Nature Conservancy Council
CONTENTS

List of figures vii
Foreword viii
Preface and acknowledgements ix

Preamble 3
GENERAL INTRODUCTION 3
The background to the work 3
The scope and methods of data collection 4
The approach to data analysis 7
The style of presentation 8

Woodlands and scrub 17
INTRODUCTION TO WOODLANDS AND SCRUB 17
The sampling of woodland vegetation 17
Data analysis and the description of woodland communities 20
Mixed deciduous and oak-birch woodlands 21
Major floristic trends in relation to soils 21
Climatic contrasts between south-east and north-west Britain 23
Other floristic patterns related to climate 25
The effects of sylvicultural treatments 26
Beech and yew woodlands 28
Pine and juniper woodlands and montane willow scrub 29
Wet woodlands with alder, birch and willows 30
Scrub and underscrub communities 34

KEY TO WOODLANDS AND SCRUB 35

COMMUNITY DESCRIPTIONS 47
W1 Salix cinerea-Galium palustre woodland 48
W2 Salix cinerea-Betula pubescens-Phragmites australis woodland 52
W3 Salix pentandra-Carex rostrata woodland 65
W4 Betula pubescens-Molinia caerulea woodland 72
W5 Alnus glutinosa-Carex paniculata woodland 80
W6 Alnus glutinosa-Urtica dioica woodland 91
<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>W7   Alnus glutinosa-Fraxinus excelsior-Lysimachia nemorum woodland</td>
</tr>
<tr>
<td>W8   Fraxinus excelsior-Acer campestre-Mercurialis perennis woodland</td>
</tr>
<tr>
<td>W9   Fraxinus excelsior-Sorbus aucuparia-Mercurialis perennis woodland</td>
</tr>
<tr>
<td>W10  Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland</td>
</tr>
<tr>
<td>W11  Quercus petraea-Betula pubescens-Oxalis acetosella woodland</td>
</tr>
<tr>
<td>W12  Fagus sylvatica-Mercurialis perennis woodland</td>
</tr>
<tr>
<td>W13  Taxus baccata woodland</td>
</tr>
<tr>
<td>W14  Fagus sylvatica-Rubus fruticosus woodland</td>
</tr>
<tr>
<td>W15  Fagus sylvatica-Deschampsia flexuosa woodland</td>
</tr>
<tr>
<td>W16  Quercus spp.-Betula spp.-Deschampsia flexuosa woodland</td>
</tr>
<tr>
<td>W17  Quercus petraea-Betula pubescens-Dicranum majus woodland</td>
</tr>
<tr>
<td>W18  Pinus sylvestris-Hylocomium splendens woodland</td>
</tr>
<tr>
<td>W19  Juniperus communis spp. communis-Oxalis acetosella woodland</td>
</tr>
<tr>
<td>W20  Salix lapponum-Luzula sylvatica scrub</td>
</tr>
<tr>
<td>W21  Crataegus monogyna-Hedera helix scrub</td>
</tr>
<tr>
<td>W22  Prunus spinosa-Rubus fruticosus scrub</td>
</tr>
<tr>
<td>W23  Ulex europaeus-Rubus fruticosus scrub</td>
</tr>
<tr>
<td>W24  Rubus fruticosus-Holcus lanatus underscrub</td>
</tr>
<tr>
<td>W25  Pteridium aquilinum-Rubus fruticosus underscrub</td>
</tr>
</tbody>
</table>

INDEX OF SYNONYMS TO WOODLANDS AND SCRUB 369

INDEX OF SPECIES IN WOODLANDS AND SCRUB 377

BIBLIOGRAPHY 385
FIGURES

Figure 1. Standard NVC sample card 5
Figure 2. Distribution of samples available for analysis 7
Figure 3. Floristic table for NVC community MG5 Centaurea nigra-Cynosurus cristatus grassland 10
Figure 4. Sampling from a woodland 18
Figure 5. Three completed sample cards from woodlands 19
Figure 6. Sampling from hedges 20
Figure 7. Distribution of samples available from woodlands 21
Figure 8. The six mixed deciduous and oak-birch woodlands in relation to soils and climate 22
Figure 9. Regional patterns among the mixed-deciduous and oak-birch woodlands 23
Figure 10. Distribution of samples of mixed-deciduous and oak-birch woodlands with a ground carpet of Hedera helix 25
Figure 11. Distribution of samples of mixed-deciduous and oak-birch woodlands with rich Atlantic bryophyte flora under a scrubby canopy 26
Figure 12. Distribution of samples of mixed-deciduous and oak-birch woodlands with a Boreal element among their flora 26
Figure 13. Dominance and its relation to treatment among the major trees and shrubs of the mixed-deciduous and oak-birch woodlands 27
Figure 14. The beech and yew woodlands in relation to soils and climate 29
Figure 15. The pine and juniper woodlands and montane willow scrub in relation to soils and climate 31
Figure 16. Possible phytosociological affinities of drier British woodlands 32
Figure 17. Simple and complex mosaics in mires with Salix-Carex woodland 68
Figure 18. Different topographies and vegetation patterns with Alnus-Fraxinus-Lyssimachia woodland 107
Figure 19. Variations in canopy and underwood in Fraxinus-Acer-Mercurialis woodland at House Copse, Rusper in Sussex 140
Figure 20. Mixed deciduous and oak-birch woodlands at Kisdon Force, North Yorkshire 165
Figure 21. Patterns among oak-birch woodlands in relation to soils and treatment 208
Figure 22. Canopy and understory in Fagus-Mercurialis woodland at White Hill, Surrey 218
Figure 23. Canopy physiognomy in Taxus woodland at Juniper Bottom, Surrey 235
Figure 24. Distribution of sub-communities of W17 Quercus-Betula-Dicranum woodland through Lochaber and Strathspey 287
Figure 25. Patterns of grassland, underscrub and scrub in neglected pasture and on managed verge 360
FOREWORD

This work is a landmark in the historical journey of British botany. It will provide a source of reliable information about vegetation for research workers, conservation managers and dedicated amateurs for many years to come.

It is the culmination of fifteen years’ detailed survey and analysis of British vegetation. It began in 1975 with a contract from the Nature Conservancy Council to Lancaster University and involved leading ecologists in this and other universities contributing their particular skills in a coordinated team. During the course of the project, many other botanists and researchers have willingly supplied their data and ideas, which have enhanced the final work greatly.

The published work will be in five volumes – woodlands and scrub; mires and heaths; grasslands and montane vegetation; aquatic communities, swamps and tall-herb fens; maritime and weed communities.

The aim of the project is to describe British vegetation as a series of plant communities, to understand how these relate to one another and to set them in a wider European context. The scheme is systematic and analytical and it takes into account the influence of environmental factors and management practices, an understanding of which is vital for the conservation of vegetation.

We who are the inheritors of the good work of the Nature Conservancy Council will use the work also in measuring our own progress in conserving and studying the rich variety of British plant communities.

[Signature]

Professor Sir Frederick Holliday CBE DL FRSE
Chairman Designate
Joint Nature Conservation Committee
The publication of this the first of five volumes of British Plant Communities sees the work of the National Vegetation Classification into its final stage. When the research team first came together in 1975, we none of us thought that the task ahead would be so laborious as to be fifteen years in the completion. It has been a long haul for all of us and, particularly in these closing years, when the responsibility for bringing the work to a good end has fallen mainly on me, the continuing interest of all the participants, and the encouragement and expectation of many others, have been of enormous importance.

As coordinator of the project and editor of the volumes, I know the extent of the debt which we all owe to the originators of the proposal that here comes to fruition. Among our team, Donald Pigott provided a firm conviction that an understanding of plant communities is of inestimable value in ecology and conservation, and his own perception has helped set the style for the kind of vegetation descriptions we have aimed to produce. Andrew Malloch’s concern to see the vision realised has been just as constant: his own studies were a model for our work and, from the start, he has given that firm support with the everyday working of the project that was essential for its success.

The Nature Conservancy had first accepted the need for such a project in 1971, in research proposals by Derek Ratcliffe, who, as Chief Scientist of its successor, the Nature Conservancy Council, welcomed the proposal by Donald Pigott and was later instrumental in placing the contract for the work and helping to launch it. His own achievements provided a vital inspiration for our work, and his continuing faith in its value helped sustain us in the long task of bringing its results to light. The Nature Conservancy Council has maintained its funding for the research throughout, and, without this commitment, the project would have founded. Tim Bines, who became NCC nominated officer to the project part way through, brought an understanding which was greatly valued in the difficult middle years, and Lynne Farrell, who succeeded him towards the close, has helped see the enterprise through with vigour.

The description of woodland and scrub communities, which are the subject of this volume, was just one part of the enterprise, but it was an especially difficult one. These kinds of vegetation are among the most complex of which we had to give an account and there were few existing data on which we could draw. I am more than ever grateful to my fellow members of the research team, then, for the industry with which they searched out and sampled woodlands and scrub along with all the other vegetation types they had to survey in their regions. The bulk of the sampling here was carried out by the four research assistants, Jacqueline Huntley (née Paice), Elaine Radford (née Grindey), Martin Wigginton, Paul Wilkins, and myself. Donald Pigott and the research supervisors, John Birks, Andrew Malloch, Michael Proctor and David Shimwell, also provided some data and, while maintaining all their responsibilities in their university posts, controlled the direction of the whole project and monitored its progress. Cooperation was the watchword here, sampling and data review being very much team efforts, though our common purpose did not preclude a diversity of individual contributions nor some entertaining exchanges. Indeed, when we were first beginning to work together, one of our meetings to discuss the scope of the task before us took us to a Cambridgeshire wood, where we had a lively discussion about the vegetation patterns and their meaning. It is one of my chief hopes that, among the sheer grind of our labour, we have managed to preserve some of that early freshness of observation and enquiry.

A number of other workers and organisations helped us at this stage of our research into woodlands and scrub. Katherine Hearin, seconded from the NCC for a single year, was to be a very welcome addition to our team, providing much needed samples from southern Scotland, while Messrs Eric Birse and James Robertson of the Macaulay Institute in Aberdeen kindly allowed us access to all their data from Scotland. Drs Bryan Wheeler and Mary Edwards and the Rev. Gordon
Graham generously let us incorporate samples which they had collected and many NCC regional staff, members of conservation and natural history societies, and flora recorders helped us spread the overall geographical and floristic coverage by directing us to representative sites for sampling.

Among the NVC team, John Birks and Jacqueline Huntley had particular responsibility for the analysis of what became the largest data set ever assembled from British woodlands and scrub, and they in turn were kindly assisted by Dr Brian Huntley in the development of computerised classification techniques at Cambridge. Jacqueline generously continued working with John Birks beyond the end of her contract with the project and I am greatly indebted to them both for the firm foundation which they laid for our woodland scheme, and for their continuing concern for the welfare of the whole project.

During my own further processing of the material which they provided and in the writing of the community accounts, the major debt I owe is to Donald Pigott whose encouragement and criticism, reflecting a deep appreciation of woodland ecology, was a continual challenge to me. Professor Roy Clapham also provided helpful comments on early drafts and I have benefited at various stages in the writing from discussions with Drs Margaret Atherden, Susan Barker, Peter Grubb, Martin Hermy, Daniel Kelly, Oliver Rackham, Ulrike Sachse, Bryan Wheeler and Bogdan Zamanek, Messrs Jack Lavin and Geoffrey Wilmore of the West Yorkshire Data Bank and various staff of the Forestry Commission. Undergraduate students at Lancaster University and course members attending the Juniper Hall Field Study Centre have also provided valuable field tests of the classification.

As our scheme began to take shape, it was very heartening to us that the NCC was able to look forward to integrating our proposals with the invaluable historical perspective on woodlands developed by Dr George Peterken. I have been especially encouraged by Dr Keith Kirby who has been providing a searching commentary on our classification for some time, and building on our early experience of training NCC staff in using the NVC approach to the description of woodland vegetation. Among these staff, Ms Jane MacIntosh and Mr Richard Tidwell pioneered the use of the classification in Scotland with exemplary industry and initiative, while Dr Tony Whitbread and Mr Gavin Saunders have helped to produce some highly informative guides to the scheme.

Other people have made an important contribution to the progress of the whole project at various stages. In the early years, Mr Philip Harper provided technical help and Miss Frances Rake assistance with data handling while, at various times, Mrs Beryl Fletcher, Mrs Sylvia Peglar, Mrs Mary Pettit, Mrs Margaret Pigott and Mrs Mary West coped cheerfully with the tedium of data coding. Then, secretarial help was provided by Mrs Jennie Ford, Mrs Claire Ashworth and, over the final seven years, by Mrs Carol Barlow, to whom I am especially grateful for her outstanding efficiency in typing virtually the entire text, tables and indices for all five volumes. In each of the universities involved in the work, Cambridge, Exeter, Manchester and particularly Lancaster, which was the major contractor, many other staff have helped provide a productive home for the project, servicing its numerous calls on administration, computing facilities and libraries.

In our discussions about publication, I have been much helped by Mr Philip Oswald of the NCC and by various staff at the Cambridge University Press who have been enthusiastic from the beginning at the prospect of handling this task. Mr Martin Walters dealt with the early negotiations for the Press and continued to provide encouragement as the manuscript was being prepared. More recently, Dr Alan Crowden has faced with great confidence the formidable task of transforming the material into books. At this stage, too, as we look forward to the increasing application of the work in a challenging environment, I have been enormously cheered by the enthusiasm of Dr Peter Bridge-water, who succeeded Dr Ratcliffe as Chief Scientist of the NCC.

Finally, this kind of enterprise takes a toll which cannot be counted in time and money, and the sharing of which it is more difficult to bear or to acknowledge. A few have taken this strain with us, bound to the task by their loyalty to us. For my part, I want to thank Rosemary, my wife, who, over fifteen years of living with this work, has known something of its real cost.

John Rodwell

Lancaster