

Preface

The landforms of the earth are mostly clothed with vegetation. We, the authors, have been able to study such vegetation during our full working lives, and it has been enormously rewarding. Like the architectural heritage of the built environment, landscape has the power to be uplifting. This reaction is personal, but nevertheless real. We like being in plant communities. We also like trying to find out how they work: using science to seek the processes that mould vegetation, searching for general patterns and attempting the formulation of community-level theories. Such study is a homage to nature.

Books exist describing the plant communities of parts of the world, or the whole of it. Other books assume that there are rules governing the assembly of communities. We hope to examine plant communities in general terms, but without preconceptions about them. The term 'reductionist' means that we start with the basic attributes of plants, and do not believe the more complex concepts of community ecology without good evidence. We have deliberately concentrated on areas where we feel we have a particular contribution to make to the literature. In a book with such a wide scope, it has been possible to mention only a small fraction of the literature for any particular topic. We have therefore included the work that strikes us as particularly useful or novel, even if occasionally there are some problems with it. We are not generally seeking to summarise the field as a textbook would. Rather, we are often putting forward another view, another emphasis, hoping to stimulate ecologists and their postgraduate students to think of plants, plant communities and the processes that shape them in a different way.

The overall conclusions have been the most difficult. Our argument from first principles has not led us to an overarching theory, but then the closest anyone has come to this is F. E. Clements, to whom we dedicate this book. He saw much and understood much, but his conclusions were mainly descriptive rather than predictive. There is only one recent realistic and comprehensive theory, C-S-R, and the real world turns out to be too complex for it to be more than a guide. At present, community ecologists can only see through a glass darkly.

We have provided a glossary limited to terms that will be less familiar, or have been used in a variety of ways in the literature.

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