

Preface

The ideas behind this book arose from the work undertaken as part of the ModMED research project under the auspices of the Environment Programme of the European commission¹. As part of this project, the development of the vegetation landscape in recent decades was analysed using aerial photo-interpretation at sites in Italy, Greece and Portugal. These studies showed major expansion of shrubland and forests in previously cultivated and grazed areas *in contrast* with the widely assumed ongoing climate-driven desertification in the Mediterranean area. In order to test this conclusion in a larger number of sites around the Mediterranean basin, more than half of the chapters of this book were commissioned to scientists outside the original ModMED team.

The Mediterranean region has been shaped by human activity and maintained by traditional practices of land use for centuries or millennia. This has affected the distribution of plants and the landscape, which can be considered as part of the European cultural heritage. This book is about the rapid changes that have taken place in the vegetation of the Mediterranean in the last half-century, a period in which major socio-economic development greatly affected the ancient, traditional landscape and, in a broader sense, the cultural environment and the human perception of nature. The book develops a view that contradicts the generally held notion of traditional land management as being in balance with nature for millennia until the imbalance of recent decades, which is apparently leading to catastrophic desertification. The view held here is closer to the reverse in which recent decades have allowed a major recovery of the ecological system throughout the Mediterranean basin.

The book is aimed at a spatial scale *in between* the traditional broad-scale characterisations and the detailed small-area studies. The timescale of the studies

(analysis of change over 50 years) bridges historical and contemporary studies and is focused on *observed* vegetation change within its socio-economic and cultural context *across* the Mediterranean. Previous works have tended to concentrate on one or a few sites in great detail (such as the classical studies of Rackham) or, on the other hand, on the Mediterranean scale in a very generalised way through mapping or remote sensing. The approach of this book is to bridge these scales to provide a Mediterranean-wide view, but through detailed research on land use and cover at a variety of sites.

Descriptions and explanations of observed changes of vegetation types and cover are given without reverting to some long-term global change but within the context of the dynamics of agricultural, ecological and socio-economic context of the countries reviewed. The collection of chapters gives a good overall picture of what is happening around the Mediterranean basin in terms of vegetation landscape dynamics and concludes that land abandonment has triggered major recovery of woodlands, whereas under traditional land use the vegetation is either stable or degrading. As mentioned before, the evidence arising from this picture is that local land use and not global change is the driving factor for observed changes in the Mediterranean and that indeed there is no evidence for a Mediterranean-wide desertification process.

The initial section of the volume provides a background of the vegetational state and history in the Mediterranean region, whereas the final contributions discuss the interactions between climate and land-use changes in terms of vegetation effects. The chapters are not diluted by long-winded discussions of methodology but focus in a clear, standardised form on providing the empirical data and on the analysis and interpretation required to develop the conclusions. The message from the book will be of interest to those studying vegetational history and dynamics as well as to those in the global change research community and also to the practitioners of land use and landscape planning. For example, the conservation of biodiversity and the increasing problem of wildfire in the Mediterranean

¹ModMED I and II (Modelling Vegetation Dynamics and Degradation in Mediterranean Ecosystems), EV5V-CT94-0489, ModMED III (Modelling Mediterranean Ecosystems Dynamics). Scientific Officer Denis Peter, DGXII/D2-ENV4-CT97

region can be better managed by understanding the interactions of landscape and land use with land-cover changes in different national and local contexts.

Though this book is focused on the European Mediterranean area, there will be lessons that will be of value to practitioners and academics working in Mediterranean environments throughout the world. Vegetation scientists will find many case studies of change and its drivers, the global change community will discover something of the resilience and the variability of the Mediterranean vegetation and practitioners will see some of the results of past land-use strategies, positive and negative.

In the end, the value of this book reflects the efforts of the contributors who the editors would like to congratulate for producing excellent chapters within the limits of time and space that were set. An early draft of the book benefited from the comments of three anonymous reviewers to whom we are grateful. Sophia Burke is thanked for carrying out a thorough revision of the English language. We are also grateful to Antonello Migliozi for his assistance in the editing of figures. Finally Sally Wilkinson and, later Keily Larkins and Susan Barclay from John Wiley are acknowledged for helping us see the volume through to a successful end.

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