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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	1 Introduction -- 1.1 The global importance of fire -- 1.2 Why we have written this book -- 1.3 What this book is about -- 1.4 Methods of fire ecology -- 1.5 Ecological concepts and fire ecology -- 1.6 Fire and the ecology of plants -- 2 Why and how do ecosystems burn? -- 2.1 The fire regime -- 2.2 Prerequisites for fire -- 2.3 Plants as 'fuel': what makes vegetation flammable? -- 2.4 Fire recurrence intervals and their measurement -- 2.5 Temperature of fires and survival of plant tissues -- 2.6 Conclusions -- 3 Surviving fires — vegetative and reproductive responses -- 3.1 Vegetative survival -- 3.2 The post-burn environment as reproductive stimulus -- 3.3 Reproduction and fire -- 3.4 Fire life-histories -- 3.5 Conclusions -- 4 Plant demography and fire I. Interval-dependent effects -- 4.1 Introduction -- 4.2 Types of population growth -- 4.3 Modelling populating growth -- 4.4 Demography and the fire-interval hypothesis -- 4.5 Density dependence and population regulation — the self-regulatory hypothesis -- 4.6 Event-dependent dynamics and population regulation -- 4.7 Conclusion -- 5 Plant demography and fire II. Event-dependent effects -- 5.1 Introduction -- 5.2 Effects of fire intensity and season on survival -- 5.3 Effects of fire

intensity and season on recruitment -- 5.4 Effects of climate variation on recruitment -- 5.5 Effects of ground fires -- 5.6 Effects of fire area -- 5.7 The causes of event-dependent effects -- 5.8 Explaining survival patterns -- 5.9 Explaining recruitment patterns -- 5.10 Predicting event-dependent effects -- 5.11 Event-dependent effects in different biomes -- 5.12 Conclusions -- 6 Fire and the evolutionary ecology of plants -- 6.1 Fire and the evolution of plant traits -- 6.2 Sprouters versus non-sprouters -- 6.3 Life-history evolution -- 6.4 Timing of reproduction and recruitment -- 6.5 Evolution of fire-survival traits -- 6.6 Evolution of flammability -- 6.7 Conclusions -- 7 Fire, competition and the organization of communities -- 7.1 Introduction -- 7.2 What determines changes in plant communities over time? -- 7.3 What determines spatial patterns in communities? -- 7.4 Which combinations of species occur together and why? -- 7.5 Determinants of species diversity -- 7.6 Which rules for which communities? -- 7.7 Conclusions -- 8 Fire and management -- 8.1 Introduction -- 8.2 Fire as a versatile management practice -- 8.3 Predicting the ecological effects of fire -- 8.4 Managing fires -- 8.5 Conclusions -- 9 Fire and the ecology of a changing world -- 9.1 Introduction -- 9.2 Climate, fire and biogeography -- 9.3 Changing patterns of fire in modern landscapes -- 9.4 Ecological consequences of changing fire regimes -- 9.5 Conclusions -- References -- Species Index.

Sommario/riassunto

Large regions of the world are regularly burnt either deliberately or naturally. However, despite the widespread occurrence of such fire-prone ecosystems, and considerable body of research on plant population biology in relation to fire, until now there have only been limited attempts at a coherent conceptual synthesis of the field for use by students or researchers.
