

Contents

Chapter 1	
Characteristics of South African Biomes	
B.J. HUNTLEY	1
Chapter 2	
Fire Regimes in the Biomes of South Africa	
D. EDWARDS	19
Chapter 3	
Man's Historical and Traditional Use of Fire in Southern Africa	
M. HALL	39
Chapter 4	
An Historical Review of Research on Fire in South Africa	
J.D. SCOTT	53
Chapter 5	
Fire in Fynbos	
F.J. KRUGER and R.C. BIGALKE	67
Chapter 6	
Fire in Grassland	
N.M. TANTON and M.T. MENTIS	115
Chapter 7	
Fire in Savanna	
W.S.W. TROLLOPE	149
Chapter 8	
Fire in Forest	
J.E. GRANGER	177
Chapter 9	
Fire Behaviour	
W.S.W. TROLLOPE	199
Chapter 10	
Effects of Fire on Vegetation Structure and Dynamics	
F.J. KRUGER	219

Chapter 11

The Effect of Fire on Forage Production and Quality

M.T. MENTIS and N.M. TAINTON 245

Chapter 12

Effects of Fire Regime on Faunal Composition and Dynamics

R.C. BIGALKE and K. WILLAN 255

Chapter 13

The Responses and Survival of Organisms in Fire-Prone Environments

P.G.H. FROST 273

Chapter 14

The Effect of Fire on Soil and Microclimate

A. CASS, M.J. SAVAGE, and F.M. WALLIS 311

Chapter 15

The Effect of Fire on Water Yield

J.M. BOSCH, R.E. SCHULZE, and F.J. KRUGER 327

Chapter 16

The Use of Fire as a Management Tool

P.J. EDWARDS 349

Concluding Remarks. Fire Research – a Perspective for the Future

P. DE V. BOOYSEN 363

References 367

Index of Plants and Animals (Scientific) 405

Index of Plants and Animals (Common) 412

Subject Index 418