

# Contents

|          |   |            |
|----------|---|------------|
| <b>1</b> | <b>Savannahs</b>  | <b>1</b>   |
|          | Distribution world-wide                                 | 2          |
|          | African savannahs                                       | 9          |
| <b>2</b> | <b>The Vegetation</b>                                   | <b>27</b>  |
|          | Rainfall, plant biomass and grass-tree mixture          | 27         |
|          | Morphology and life history                             | 30         |
|          | Grasses   | 38         |
|          | Trees   | 41         |
|          | Local vegetation patterns: the Serengeti-Mara ecosystem | 57         |
| <b>3</b> | <b>The Animals</b>                                      | <b>65</b>  |
|          | The insects   | 65         |
|          | The birds   | 69         |
|          | The mammals   | 74         |
| <b>4</b> | <b>Single-species Populations</b>                       | <b>137</b> |
|          | Estimating numbers                                      | 138        |
|          | What changes numbers?                                   | 153        |
|          | Population models                                       | 163        |
|          | Other species in other areas                            | 168        |
| <b>5</b> | <b>Species Interactions</b>                             | <b>182</b> |
|          | Predator-prey type interactions (+ -)                   | 183        |
|          | Competitive interactions (- -)                          | 210        |
|          | Mutualistic interactions (+ +)                          | 227        |
| <b>6</b> | <b>The Savannah Community and Its Conservation</b>      | <b>237</b> |
|          | Energy flow and food webs                               | 238        |
|          | Assembly rules  | 252        |

**x CONTENTS**

|                                |     |
|--------------------------------|-----|
| Island biogeography            | 257 |
| Conserving savannah ecosystems | 264 |
| References                     | 279 |
| Index                          | 309 |