Contents

Foreword by Harry W. Greene  ix
Preface  xiii

I. THE TEXAS HILL COUNTRY: A NATURALIST’S PARADISE  1
1. Geological Setting of the Edwards Plateau  7
2. From Acid Sands to Alkaline Clays  16
3. Hill Country Weather: Droughts, Floods, and Severe Storms  20
4. Some Texas Icons Haven’t Been Here All That Long  26
5. Hill Country Endemics  30
6. What Is the Value of Biodiversity?  34

II. THE SEASONAL LIFE OF A VERNAL POOL  41
7. Tilting at Tiny Windmills  43
8. Crustacean Wonders  47
9. The Fascinating Flora of Vernal Pools  50
10. Those Who Live in Glass Houses  55
11. A Season of Symphonies  58
12. What Happened to All Our Frogs?  63

III. FLOWING WATERS: AQUIFERS, CAVES, SPRINGS, AND RIVERS  69
13. Life without Light  73
14. Lanterns of Summer  77
15. Musings about Mussels  81
16. The Last Wild River  84
IV. LIFE OF A GRASSLAND 91
17. Why Do Some Grasses Grow in the Winter, but Others in the Summer? 93
18. Butterflies, Hummingbirds, and Other Pollinators 97
19. The Noble Life of a Dung-Roller 101
20. Where Have All the Quail Gone? 106
21. Grasshoppers, Locusts, and Plagues 110
22. The History of Texas Cattle Written in Their DNA 115

V. IN THE WOODLANDS AND BRUSHLANDS 121
23. Containing and Preventing Oak Wilt 123
24. The Challenges of Being an Oak Tree in the Hill Country 127
25. How Do Trees Sense When It Is Time to Leaf Out and Bloom? 131
26. The Dr. Jekyll and Mr. Hyde of Trees 135
27. Spring Is Here, and So Are the Snakes 139
28. Songs of the Summer Dog Days 143
29. Going Batty 147
30. Deer Densities on the Edwards Plateau 151
31. Bucks in Velvet 155
32. The Future of Hill Country Deer Populations 159
33. The Carbon Cycle and How It Affects Our Daily Lives 163

VI. BACKYARD BIOLOGY 169
34. The Remarkable Life of Hummingbirds 171
35. Ways to Attract and Increase Bird Populations 175
36. The Unexpected Beauty and Diversity of Lichens 179
37. There Is More to Mistletoe Than Kissing 183
38. The Ups and Downs of Ants 186
39. A Pattern in the Web 190
40. Caterpillar Plagues and Their Connection to the Weather 193
41. Predators and Second Chances 197

VII. CLIMATIC ADAPTATIONS 203
42. Toadally Cool 205
43. The Surprising Life Cycle of a Monarch Butterfly 207
44. How Do Animals Survive the Winter? Part 1: Migrating 211
45. How Do Animals Survive the Winter? Part 2: Keeping Warm and Active 215
46. How Do Animals (and Plants) Survive the Winter? Part 3: Waiting Out the Cold 219

VIII. RESTORATION AND THE FUTURE OF THE HILL COUNTRY’S NATURAL RESOURCES 225
47. The Restoration and Benefits of Native Grasses 229
48. The Pros and Cons of Brush Control 233
49. Recovery of a Texas Icon: The Texas Horned Lizard 237
50. Avoiding the Dangers of Lead Poisoning in Game Meat 240
51. Our Climate Future in Central Texas 244
52. If the Earth Is Warming, Why Did We Have a Record Cold Snap? 248
53. Practical, Painless, and Significant Solutions to Climate Change 252
54. Six Resolutions for Supporting Native Plants and Animals 256

Index 261