

Contents

Preface ix

Introduction 1

Part One. Discovering the Tree of Life

1. The Tree's Microbial Branches 21
2. Relationships among Organisms 49
 3. Enter DNA 80
 4. The Rosetta Stone 97
5. From the Tree's Roots to Its Branches 116

Part Two. Doubts and Complications

6. Genes from Neighbors 141
7. Can the Receiving Cell Say No? 170
8. Can the Tree Be Trusted? 187

Part Three. Understanding the Tree of Life

9. The Tree's Ecological Fruit 217
10. The Tree's Beginnings 232

Further Reading 255

Acknowledgments 265

Illustration Credits 267

Index 269