

TABLE OF CONTENTS

Prologue	13
----------------	----

The Great Dying	17
-----------------------	----

The Triassic

<i>(251.9 to 201.3 million years before present)</i>	25
--	----

Chapter 1:

New Life in the Sea	27
---------------------------	----

<i>Omphalosaurus</i> : Crushing It!	27
---	----

Nevada's Ichthyosaurs: All Just One Big Family	38
--	----

Of Strange Monsters and Underwater Flight.....	52
--	----

Chapter 2:

New Life on Land.....	57
-----------------------	----

Survival in Hell: The Road to Dinosaur Domination	57
---	----

The Dragon Who Wanted to Be a <i>Tyrannosaurus</i>	66
--	----

Where the Wild Things Are	73
---------------------------------	----

The First Giants: Hundreds of Long-Necked Dinosaurs Stuck in Mud.....	75
--	----

The Jurassic
(201.3 to 145 million years before present)87

Chapter 3:
The Dinosaurs of the Morrison Formation 91
 The Bone Wars 91

Chapter 4:
Germany’s Dinosaurs..... 99
 How, on an Island, a Giant Turned into a Dwarf 99
 The First Feather That Changed Everything:
 Archaeopteryx..... 106
 The Adventures of Werner Janensch 110

The Lower Cretaceous
(145 to 100.5 million years before present).....117

Chapter 5:
Argentina—Where the Giants Live119
 The Long-Necked Dinosaurs That
 Tower over Everything 119

Chapter 6:
Myanmar—Trapped in “Liquid Gold”131
 Feathers, Claws, and Ticks in Amber 131
 A Dinosaur Even Smaller than a Hummingbird? 136
 A Moral Dilemma..... 142

Chapter 7:
The Spinosaurus..... 145
 The Adventures of Ernst Stromer in Egypt 145
 Spinosaurus: On Land, on the Shore, or in the Water?..... 150
 Fish and No Chips: The Fish Eaters of the Isle of Wight.... 159

Chapter 8:

More than Just Bones	165
The Super-Lung.....	165
The Cloaca: How Do Dinosaurs Make Wee-Wee?	166
Do Female Dinosaurs Have Ovaries?	168
The Grace of the Sleeping Club-Tail Dragon.....	169

The Upper Cretaceous

<i>(100.5 to 66 million years before present).....</i>	<i>175</i>
---	-------------------

Chapter 9:

Wyoming—The Hell Creek.....	177
<i>Triceratops</i> : A Tank on Four Legs	177
How a Cretaceous Landscape is Resurrected.....	181

Chapter 10:

<i>Tyrannosaurus—The Measure of All Things!</i>	<i>193</i>
The Power of the Brand:	
Why <i>Tyrannosaurus</i> Is So Popular.....	193
A Record Sum for the King.....	197
How Many <i>Tyrannosaurs</i> Were There?	198
Why <i>Tyrannosaurus</i> Was Not a Scavenger	201
Different Prey for Father and Son.....	206
I Am the King and Not a Peacock: Did <i>T. rex</i> Have Feathers?	
.....	213
Short Arms Are Normal but Long Ones Are Strange	217
Boy or Girl: Was Sue Female?	220
The King, the Queen, and the Emperor	221

Chapter 11:

Movement Captured in the Stone: What Footprints Tell Us ...	227
The German Dinosaur Highway.....	227
The Dinosaur Tracks of Lommiswil.....	230
The Track Site of Cal Orck'o in Bolivia.....	233

Chapter 12:

Birds–The Last Dinosaurs235

 Where Is the First Ostrich? 235

 Almost Like Easter: An Egg Thief Who Lays Colorful Eggs
 241

 The Goddess Asteria: The Mother of All Chickens and Geese
 244

 Beyond the Rainbow 246

Chapter 13:

The End of the Dinosaurs255

 The Day it Rained Glass 255

 Like a Phoenix From the Ashes: How Birds Survived the Catastrophe
 259

Epilogue 265

Glossary267

References 283

Acknowledgments 291

Phylogeny 294

Time Scale 296

Index 299