

The Author’s Apology for His Little Book	1
Chapter 1 — For the Christian in a Hurry: The 300-Year Party	9
Chapter 2 — A Personal Journey	25
A Brief Autobiography	26
The Machine Stops	28
A Chemical Engineering Magazine Article	33
Entropy: Into the Greenhouse World	34
A History of Knowledge	36
Augustine of Hippo	37
Galileo Galilei	37
Francis Bacon	39
René Descartes	41
Isaac Newton	42
A Glimpse into the Future	43
Twilight in the Desert	44
Down The Hubbert Curve	46
Peak Oil	47
Nuclear Power	49
The Archdruid Report	50
Predicaments and Problems	52
Spiritual and Physical Worlds	53
Christianity	53
Avoidance of Extremes	54
Story-Telling	54
Hard Times for These Times	55
A Failed Prediction	56
Hegelian Synthesis	58
Jevons Paradox	61
Sustainable Growth: An Oxymoron	62
Peak Prosperity	62
The Three ‘E’s’	63
Crash Course	63
Cassandra’s Legacy	64
Resource Insights	65
The Last Question	66
Some Hope	67
Chapter 3 — Through a Glass Darkly	69
Need for Humility	70
The Linearity Trap	71
Black Swan Events	72
Unknown Unknowns	73
Complex Systems	74
Self-Fulfilling Prophecies	75
Thinking the Unthinkable	75
Experts	75
Collapse	76
Chapter 4 — World Views	81
Homo Sapiens	82

Control of Fire.....	83
Abstract Thinking.....	84
Group Organization	85
Hunter-Gatherer World View	85
Way of Life.....	85
Religion.....	86
Agricultural World View / Garden of Eden.....	87
Surplus.....	88
Social Structure	88
Religion.....	89
Writing and Money	89
Nation States	90
Mechanical World View.....	91
Success	91
Religion.....	92
De Descriptione Temporum	93
Evolution.....	94
A “Long Time”	95
Survival of the Most Adaptable	95
No Modern Chain of Being.....	96
Anthropocene World View	96
Self Awareness	97
Future Shock.....	98
Religion.....	98
Chapter 5 — Physical Realities	101
Thermodynamics	102
The Zeroth Law	103
The First Law.....	106
The Second Law.....	106
Quality of Energy	108
Pollution	109
The Third Law	110
Jevons Paradox	111
The Coal Question	111
The Paradox.....	112
The Katy Freeway	114
Demand Reduction Is Crucial	114
Compassion	115
Chapter 6 — The Age of Limits.....	117
Resources	118
Alice and the Red Queen.....	119
Nine Pounds of Gold.....	121
ERoEI.....	123
Gross Energy.....	123
Net Energy	123
Return on the Investment	124
Other Energy Sources.....	125
Qualitative Issues	126

Tight Oil / Shale Oil / Fracking	127
Technology	129
Financial.....	130
Depletion	131
Environmental Impact	132
Environment	133
The Tragedy of the Commons	133
Externalities.....	134
NORM in North Dakota	135
APEC Blue	135
The Cloud.....	136
Pollinator Collapse.....	137
Global Warming.....	137
Background.....	138
Trends.....	138
The Clathrate Gun	139
Sunspots / Solar Minimum	140
Finance	141
Growth.....	141
Inflation / Deflation	142
Response of Experts	144
Political Promises.....	145
Usury	146
Income Disparity	149
Population	149
Manufacturing.....	151
Crude Oil.....	151
End Products	153
Chapter 7 — Pilate’s Question	155
<i>De Mendacio</i>	156
An Empire of Lies	158
Plato's Cave	161
All Are Prisoners	162
Truth Hurts	162
Hostile Reception	163
The Real and Spiritual Worlds	163
Doubting Thomas	163
Denial.....	164
Belief.....	165
Complexity.....	166
Cognitive Dissonance	168
Confirmation Bias	170
Ecological Amnesia	171
The Dunning-Kruger Effect	171
Pluralistic Ignorance	173
Types of Denial	173
The Red-Face Test	173
Just Two Degrees.....	174

Cornucopians.....	174
True (Dis)Believers	175
Harsh Reality	176
The Cynics.....	177
Energy Companies.....	178
Investors.....	180
Bright Green Deniers / Lexus Liberals	181
Easy Solutions.....	181
Yellow Vests.....	181
Both Sides-ism	182
Communication	183
Cassandra	183
Language and Words.....	184
Personality Types	184
Educational Background.....	186
Dilbert’s Pointy-Hair Boss.....	186
Sources of Information.....	187
Books	187
What a Web.....	188
Computer Models.....	188
Responding to Denial.....	189
Seeing Is Believing	191
Simple Facts.....	192
Humor.....	193
Story-Telling.....	193
A Truly Inconvenient Truth.....	194
Chapter 8 — An Educated Citizen	197
Death of a Little Boy	198
Systems.....	198
Saltiness.....	200
Counter-Intuitive Results	200
Paper or Plastic?	200
Disposable Cups.....	201
Goldilocks and the Price of Oil	201
Electric Vehicles.....	202
Why Trees.....	204
Straight Bananas.....	206
Complexity.....	207
Individualism	208
Renaissance Thinking.....	209
The Two Cultures.....	210
Experts.....	212
Big Data	214
Francis I.....	214
CEO, Not an Expert	214
Population	216
Sister, Mother Earth	216
The Education Process.....	217

1. Select the Topics.....	218
2. Fundamentals and Definitions	218
3. Research	218
4. Experts.....	218
5. Form an Educated Opinion.....	218
Chapter 9 — Responses.....	219
Confessions.....	219
Predictions	220
A Small World	222
Resources	223
Social Structure	223
Technology	223
Climate Change	224
Way of Thinking.....	224
Culture.....	225
Population	225
Religion.....	225
Responses.....	225
Path 1 — Mary Poppins, <i>A Dea ex Machina</i>	227
Homo Deus.....	228
Technological Progress.....	230
Hopium.....	232
Path 2 — National Response	233
Failure to Respond	233
Centralized Planning.....	235
Out of the Mouths of Babes Teenagers	236
Path 3 — Reduce Impact	238
Reduction in Energy Use	238
Reduce CO ₂ Concentrations	239
Increased Efficiency.....	239
Carbon Capture / Sequestration	239
Path 4 — Alternative Energy Sources.....	240
Current Energy Consumption by Source	240
Practical Difficulties.....	241
Scalability.....	241
Speed of Adoption.....	246
Self-Contained Systems.....	247
Biofuels.....	247
Wind Power.....	249
Solar Power	250
Nuclear Power (Fission).....	250
Safety.....	251
Fukushima-Daiichi	252
Long-Term Waste Disposal.....	253
Cost.....	254
Peak Uranium	254
Star’s Reach	254
Nuclear Power (Fusion).....	254

Summary	255
Path 5 — Adapt.....	256
Resilience and Efficiency	256
Women and Children Second.....	257
Retreat.....	258
Independent Survival	258
Prepping	259
Gardening.....	259
Violence	259
Chapter 10 — The Church’s Response	261
Church Membership.....	262
Rearranging the (Episcopalian) Deck Chairs on the Titanic.....	264
Mission Statements	267
The Episcopal Church	268
Interfaith Mission Statement	270
A Revised Mission Statement.....	270
The Prosperity Gospel	272
The Response Process	273
1. First Clear Your Mind of Cant	274
2. Speak the Truth	274
3. Set Priorities, Reject Post-erriorities.....	274
4. Obey the Law.....	275
5. Emotional Response and Acceptance	275
Ladder of Awareness	275
Stages of Grief	275
6. Live the Life Preached	278
7. Maintain Knowledge	278
8. Help Those in Need	278
The Church.....	279
The Adaptive Church	279
The Parish.....	280
Project Orientation.....	280
Sunday Morning Worship.....	281
Need for Authority	281
Monasticism	282
Chapter 11 — Theology.....	283
Moral Response.....	285
Reformation.....	287
Philosophies.....	288
Platonic.....	288
Aristotelian	289
Stoicism	290
Pillars of Stoicism.....	291
Christianity and Stoicism	292
Fatalism	293
Stoicism and Theology.....	294
Prophetic Scripture.....	295
Jeremiah	296

The Ark	298
Revelation.....	299
Original Sin.....	300
“Where Is God In All This?”	301
A Second Author’s Apology	303
Further Reading.....	305
Augustine: Aurelius Augustus.....	306
The Hirsch Report	308
Hot Earth Dreams	311
Collapse of Complex Societies	312
Overshoot / Bottleneck	314
Overshoot: The Ecological Basis of Revolutionary Change	314
Bottleneck: Humanity’s Impending Impasse.....	314
Ladder of Awareness	315
Sub-Reddit ‘Collapse’	318
Greer and Christianity	319
Myers-Briggs Types.....	322
INTJs	322
ESFPs.....	324
The Post Carbon Institute	327
The Great Emergence	329
The Benedict Option.....	332
Works Cited	334
Index	338