

Table of Contents

Advisors and Contributors	xv
Acknowledgements	xvii
About the Set	xxiii
Introduction	xxv
About the Entry	xxvii
Using Primary Sources	xxxv
Chronology	xxxvii

1 ROOTS OF ENVIRONMENTAL AND ECOLOGICAL THOUGHT

Introduction to Roots of Environmental and Ecological Thought	1
<i>The Pioneers</i>	2
<i>James Fenimore Cooper, 1823</i>	
<i>Birds of America</i>	4
<i>John James Audubon, 1842</i>	
<i>Walden</i>	7
<i>Henry David Thoreau, 1854</i>	
“The Big Trees of California”	10
<i>Anonymous, June 5, 1858</i>	
<i>An Overland Journey from New York to San Francisco in the Summer of 1859</i>	13
<i>Horace Greeley, 1860</i>	
<i>Man and Nature:</i>	16
<i>George Perkins Marsh, 1864</i>	
<i>The White-Thorn Blossom</i>	19
<i>John Ruskin, May 1, 1871</i>	

“Johnny Appleseed: <i>W. D. Haley, November 1871</i>	21
“The Wonders of Yellowstone” <i>Nathaniel Pitt Langford, May, 1871</i>	23
<i>Roughing It</i> <i>Mark Twain (aka Samuel Clemens), 1872</i>	26
<i>The Conservation of Natural Resources in the United States.</i> <i>Charles Richard Van Hise, 1879</i>	28
An Address by J. Sterling Morton on Arbor Day 1885 <i>J. Sterling Morton, April 22, 1885</i>	31
Octavia Hill (1838–1912) founds English National Trust <i>Augustin Rischgitz, 1892</i>	34
<i>Our National Parks</i> <i>John Muir, 1901</i>	37
Drawing the Line in Mississippi <i>Clifford K. Berryman, November 16, 1902</i>	41
Nature <i>Ralph Waldo Emerson, 1836</i>	43
<i>A Book Lover’s Holiday in the Open</i> <i>Theodore Roosevelt, 1916</i>	45
Mt. Williamson, The Sierra Nevada, from Manzanar, California <i>Ansel Adams, 1945</i>	48
The Green Belt <i>Paul and Percival Goodman, 1947; revised 1960</i>	51
‘Silent Spring’ is Now Noisy Summer <i>John M. Lee, July 22, 1962</i>	53
Rachel Carson Dies of Cancer <i>Jonathan N. Leonard, April 15, 1964</i>	57
“The Historical Roots of our Ecological Crisis.” <i>Lynn Townsend White, Jr., March 10, 1967</i>	61
“The Tragedy of the Commons” <i>Garrett James Hardin, December 3, 1968</i>	64
“American Institutions and Ecological Ideals.” <i>Leo Marx, November 27, 1970</i>	68
<i>Coming into the Country</i> <i>John McPhee, 1976</i>	72
<i>Gorillas in the Mist</i> <i>Dian Fossey, 1983</i>	76
Fascist Ecology <i>Peter Staudenmaier, 1995</i>	79

Julia “Butterfly” Hill Stands In A 200-Foot Tall Old-Growth Redwood Tree	82
<i>Gerard Burkhardt, 1998</i>	
<i>Gaia: A new look at life on Earth.</i>	84
<i>James E. Lovelock, 1979</i>	

2 THE PHYSICAL EARTH

Introduction to The Physical Earth	87
“Piecing Continents Together”	88
<i>Anonymous, August 18, 1967</i>	
“A Mountain”	90
<i>John McPhee, 1988</i>	
Sulfur plumes off Namibia	93
<i>United States National Aeronautics and Space Agency (NASA), April 24, 2002</i>	
Four False Color Views of Ocean Surface Height of the Pacific Ocean	95
<i>National Aeronautics and Space Administration (NASA), 1997</i>	
“Low Ozone Level Found Above Antarctica”	98
<i>Walter Sullivan, November 7, 1985</i>	
“A Semidesert with a Desert Heart”	100
<i>Marc Reisner, 1986</i>	
“At Last, the Smoking Gun?”	104
<i>Leon Jaroff, July 1, 19910</i>	
Fires Raging Across Indonesia	107
<i>Anonymous, September 22, 1997</i>	
“The Torino Impact Hazard Scale”	109
<i>Richard P. Binzel, 2000</i>	
Climate Change Impacts on the United States	114
<i>National Assessment Synthesis Team, U.S. Global Change Research Program, June 12, 2000</i>	
“The New View of Natural Climate Variation”	118
<i>David E. Wojack, January 2003</i>	
Dust Cloud over Japan	121
<i>NASA Sea-viewing Wide Field-of-view Sensor, March 25, 2002</i>	
Holes in Ozone Layer of Earth	123
<i>National Aeronautics and Space Administration (NASA), September 30, 2002</i>	
Earth Story	125
<i>Dean Hollingsworth, 2003</i>	
Water Resources of the United States	128
<i>United States Geological Survey, March 2004</i>	
WMO Statement on the Status of the Global Climate in 2004	130
<i>World Meteorological Organization (WMO), 2004</i>	
“Shrinking Glaciers Evidence of Global Warming:	133
<i>David Perlman, December 17, 2004/</i>	

The Seasons and the Earth's Orbit	135
<i>George H. Kaplan, 2005</i>	
"Global Warming: The Culprit?	139
<i>Jeffery Kluger, October 3, 2005</i>	

3 THE BIOSPHERE

Introduction to The Biosphere	143
<i>A Naturalist in Nicaragua</i>	144
<i>Thomas Belt, 1873</i>	
The Sewers of Paris, Purification Service	147
<i>Roger Viollet, January 1, 1900</i>	
<i>Our Vanishing Wildlife</i>	149
<i>William Temple Hornaday, 1913</i>	
Lead Helps to Guard Your Health.	153
<i>Anonymous, 1923</i>	
Botanist George Washington Carver in Arboretum	155
<i>Anonymous, Undated</i>	
Stanley Miller Working in Laboratory	157
<i>Anonymous, July 19, 1953</i>	
World Wildlife Fund	159
<i>Anonymous, August 12, 2004</i>	
"The Carbon Cycle and Climate Warming"	162
<i>Richard A. Kerr, December 9, 1983</i>	
Artificial Reefs.	164
<i>United States Code, 1984</i>	
<i>The Control of Nature.</i>	167
<i>John McPhee, 1989</i>	
Experimental Fish Guidance Devices.	170
<i>National Marine Fisheries Southwest Division, January 22, 1999</i>	
"A New Paradigm"	174
<i>Robert Duane Ballard, 2000</i>	
"From the Modern Synthesis to Lysenkoism, and Back?	178
<i>Uwe Hossfeld and Lennart Olsson, July 5, 2002</i>	
"Turning the Tide?"	181
<i>Mark Zaloudek, October 8, 2004</i>	
"Pesticide Persisting Beyond Scheduled Elimination Date".	184
<i>Felicity Barringer, October 8, 2004</i>	
Annual Permit Limits for Nitrogen and Phosphorus for Permits Designed to Protect Chesapeake Bay and Its Tidal Tributaries from Excess Nutrient Loading under the National Pollutant Discharge Elimination System	187
<i>James A. Hanlon, March 19, 2004</i>	

“Deep In the Swamp, an ‘Extinct’ Woodpecker Lives”	191
<i>James Gorman, April 29, 2005</i>	
“Ecological Landmines”	194
<i>Denis D. Gray, October 23, 2005</i>	

4 EXPLORATION

Introduction to Exploration	197
The Louisiana Purchase	198
<i>Governments of the United States and the French Republic, 1803</i>	
Expedition Chart	201
<i>Robert Frazier, 1807</i>	
Discovery of the Yosemite	203
<i>Lafayette H. Bunnell, 1880</i>	
The Pampas and Andes	206
<i>Nathaniel H. Bishop, 1869</i>	
“Yosemite Glaciers”	210
<i>John Muir, December 5, 1871</i>	
“The Excursion”	213
<i>William Wordsworth, 1888</i>	
“Expedition of 1898–1902”	215
<i>Robert E. Peary, 1907</i>	
<i>My First Summer in the Sierra</i>	218
<i>John Muir, 1911</i>	
<i>The Living Sea.</i>	222
<i>Jacques-Yves Cousteau, 1963</i>	
Voyager II’s Gold Disc “Sounds of Earth”	227
<i>Carl Edward Sagan, August 20, 1977</i>	
<i>The Log from the Sea of Cortez</i>	230
<i>John Steinbeck and E.F. Ricketts, 1951</i>	
“Isotopic Evidence for Extraterrestrial Non-racemic Amino Acids in the Murchison Meteorite”	235
<i>Michael H. Engel and Stephen A. Macko, September 18, 1997</i>	
“The Greenland Expedition of 1925”	238
<i>Richard Evelyn Byrd, 1925</i>	
The Science Bit . . . Part 3 . . . The Larsen B Ice Shelf Disintegration . . .	241
<i>Carol Pudsey, March 13, 2002</i>	

5 ENVIRONMENTAL LEGISLATION

Introduction to Environmental Legislation	245
<i>R. v. Medley and others</i>	246
<i>The English Reports, 1834</i>	

Department of the Interior Established	248
<i>United States Congress, March 3, 1849</i>	
Yellowstone National Park Act	250
<i>United States Congress, March 1, 1872</i>	
Rivers and Harbors Appropriation Act of 1899	253
<i>United States Congress, 1899</i>	
Federal Power Act of 1920, as amended.	255
<i>United States Congress, 1920</i>	
“The True History of Teapot Dome”	258
<i>Thomas J. Walsh, July 1924</i>	
Tree-toting members of Civilian Conservation Corps	261
<i>Anonymous, January 17, 1934</i>	
A Radio Address on the Third Anniversary of C.C.C..	264
<i>Franklin D. Roosevelt, April 17, 1936</i>	
Federal Insecticide, Fungicide, and Rodenticide Act.	266
<i>United States Congress, June 25, 1947</i>	
The Antarctic Treaty	270
<i>Governments of twelve nations, December 1, 1959</i>	
Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water	273
<i>Governments of the USA, the UK of Great Britain and Northern Ireland, and the USSR, August 5, 1963</i>	
The Water Quality Act of 1965	276
<i>United States Congress, October 2, 1965</i>	
<i>United States v. Standard Oil.</i>	279
<i>United States Supreme Court, May 23, 1966</i>	
Wild and Scenic Rivers Act	282
<i>United States Code, October 2, 1968</i>	
National Park Service Organic Act	286
<i>United States Congress, August 25, 1916</i>	
National Environmental Policy Act	289
<i>United States Congress, Decemebr 1969</i>	
DOI Trans-Alaska Pipeline Authorization Act.	292
<i>United States Congress, November 16, 1973</i>	
EPA Establishes Hazardous Waste Enforcement and Emergency Response System	296
<i>U.S. Environmental Protection Agency (EPA), July 11, 1979</i>	
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	298
<i>United States Code, December 11, 1980</i>	
Crude Oil Windfall Profit Tax Act of 1980 (WPT).	301
<i>United States Congress, April 2, 1980</i>	
Alaska National Interest Lands Conservation Act	304
<i>December 2, 1980</i>	

Oil Pollution Act	306
<i>United States Congress, 1990</i>	
Clean Air Act	309
<i>United States Code, November 15, 1990</i>	
United Nations Framework Convention on Climate Change.	311
<i>United Nations, 1992</i>	
Framework Convention on Climate Change	315
<i>The United Nations, May 9, 1992</i>	
Kyoto Protocol	318
<i>United Nations Framework Convention on Climate Change</i>	
HR3515-Medical Waste Tracking Act of 1988	323
<i>United States Code, January 25, 1988</i>	
Economic and Security and Recovery Act of 2001	326
<i>United States Congress, 2001</i>	
Benefits and Costs of the Clean Air Act, 1970 to 1990	327
<i>United States Environmental Protection Agency, October 15, 1997</i>	
Testimony of Christine Todd Whitman	331
<i>Christine Todd Whitman, April 8, 2003</i>	
Mercury Reduction Act of 2003	336
<i>United States Congress, February 27, 2003</i>	
Coastal Zone Renewable Energy Act of 2003	339
<i>William D. Delabunt and Jim Saxton, March 11, 2003</i>	
Marine Debris Research Prevention and Reduction Act.	343
<i>United States Congress, February 10, 2005</i>	

6 ENERGY USE AND PERILS

Introduction to Energy Use and Perils	349
Edwin L. Drake Strikes Oil in Titusville, Pennsylvania	350
<i>Anonymous, 1861</i>	
Hoover Dam	352
<i>Benjamin D. Glaba, 1934</i>	
Atoms for Peace	354
<i>Dwight D. Eisenhower, 1953</i>	
1975 State of the Union Address.	359
<i>Gerald R. Ford, January 15, 1975</i>	
Energy Policy Act of 1992	363
<i>United States Congress, 1992</i>	
“The Dam”	365
<i>Deirdre Chetham, 2002</i>	
Energy Policy Act of 2005	370
<i>United States Congress, 2005</i>	
Study on Energy Supply Security and Geopolitics	375
<i>Coby van der Linde, 2004</i>	

7 ENVIRONMENTAL DISASTERS

Introduction to Environmental Disasters	379
Debate of Senate Bill 203. 38 th Congress, 1864	380
<i>United States Senate, 38th Congress, 1864</i>	
<i>Dust Bowl Blues</i>	383
<i>Woodrow Wilson Guthrie, April 1940</i>	
Skyline of Downtown Los Angeles Shrouded and Obscured by Smog	386
<i>Anonymous, 1956</i>	
“Oil Slick is Shroud for Birds”	388
<i>Irston R. Barnes, July 22, 1962</i>	
Cumberland Mountain Area Scarred by Strip Mining	391
<i>Bob Gomel, January 1, 1967</i>	
“The Love Canal Tragedy”	392
<i>Eckardt C. Beck, January 1979</i>	
“The Big Spill:	396
<i>George J. Church, April 10, 1989</i>	
Mercury Residues and Poisoning.	399
<i>H. John Maier, Jr., 1993</i>	
Taj Mahal Facade Carving Detail with Chips	402
<i>Robert Nickelsberg, September 30, 1995</i>	
Wreckage at the Site of the World Trade Center	404
<i>Gene Shaw</i>	
The Amazonian Rainforest under Siege from Illegal Loggers	406
<i>Tom Stoddart, November 2003</i>	
“Memories Still Linger 25 Years After Three Mile Island Accident”	408
<i>Dawn Fallik, March 26, 2004</i>	
Wave’s Environmental Toll:	412
<i>Eric Bellman and Timothy Mapes, January 17, 2005</i>	
In Harm’s Way: Hurricanes, Population Trends and Environmental Change	415
<i>Roger-Mark De Souza, October 2004</i>	

8 CONSERVATION AND ACTIVISM

Introduction to Conservation and Activism	419
“An Anti-Smoke Rally”	420
<i>Anonymous, November 18, 1948</i>	
Radon Health Mines	421
<i>Carl Iwasaki, June 1, 1952</i>	
Environmental Action Group	423
<i>Anonymous, 1970</i>	

“Nation Set to Observe Earth Day”	425
<i>Gladwin Hill, April 21, 1970</i>	
“Wilderness as a Form of Land Use”	428
<i>Aldo Leopold, 1991</i>	
Environmental Damage in Post-Soviet Eastern Europe	432
<i>Chris Niedenthal, March 21, 1992</i>	
“An African Success Story”	434
<i>Nancy Chege, July 1993</i>	
“Rent-Seeking Behind the Green Curtain”	436
<i>Jonathan H. Adler, 1996</i>	
The Water Sourcebooks: K-12.	438
<i>United States Environmental Protection Agency, 2000</i>	
Sewage Protestors Hold a “Toilet Protest”	440
<i>Sion Toubig, August 7, 2001</i>	
<i>Globalization and Poverty: An Ecological Perspective</i>	442
<i>Roldan Muradian and Joan Martinez-Alier, 2001</i>	
Antinuclear Activists Confront Police.	445
<i>Sean Gallup, January 1, 1956</i>	
“And Now, a New York Version of Star Wars”	448
<i>James C. McKinley Jr., December 22, 2001</i>	
Vision Statement for the World Summit on Sustainable Development	451
<i>Paula J. Dobriansky, May 23, 2002</i>	
Warming Up to the Truth: The Real Story About Climate Change	454
<i>Sallie Baliunas, June 19, 2002</i>	
Protesters at Site of New Terminal 5, Heathrow	458
<i>David Dyson, October 6, 2003</i>	
Indian Schoolgirl Urges People to Drink Natural Beverages	460
<i>Indranil Mukherjee, August 14, 2003</i>	
<i>Boiling Point</i>	462
<i>Ross Gelbspan, 2004</i>	
Wangari Maathai-Nobel Lecture	467
<i>Wangari Maathai, December 10, 2004</i>	
“15 arrested in Land Rover protest”	470
<i>Anonymous, May 16, 2005</i>	
“Rescuing Environmentalism”	473
<i>Anonymous, April 21, 2005</i>	
“Laws Don’t Work if They’re Only on Paper”	475
<i>Raúl Pierri</i>	
Chernobyl Disaster Spurs Ecological Movements in Eastern Europe	478
<i>Sergei Supinsky, December 13, 2005</i>	

How to Conserve Water and Use It Effectively 480
United States Environmental Protection Agency, 2006

Demonstrations against Transfer of French Warship
to India for Asbestos Removal 484
Jean Ayissi, February 12, 2006