Dirt: The Erosion of Civilizations, by David R. Montgomery Google Earth QUEST – Terms, Locations, Names Prepared by Dr. Laura Guertin, Earth Science Penn State Brandywine, Fall 2009

# **Chapter 1 – Good Old Dirt**

- **Terminology**: soil, dirt, soil degradation, Dust Bowl, soil fertility, topsoil, soil exhaustion, agriculture
- Locations: Mount Pinatubo, Philippines, African Sahel, Mississippi River Basin, Caribbean
- Names: (none)

## **Chapter 2 – Skin Of The Earth**

- Terminology: terrarium, istostasy, clay, tilling, soil horizons, agronomist
- Locations: England, Appalachian Mountains
- Names: Charles Darwin

### **Chapter 3 – Rivers Of Life**

- **Terminology**: Ice Age, climate, glaciations, Quaternary, Younger Dryas, hydrologist, delta, floodplain, Neanderthals, *Homo erectus*
- Locations: North Africa, Middle East, Mediterranean Sea, Mesopotamia, Mesoamerica, Zagros Mountains, Abu Hureyra in Syria, Euphrates Valley, Tigris and Euphrates Rivers, Persian Gulf, Egypt, Nile River, China, Yellow River
- Names: Walter Lowdermilk

### **Chapter 4 – Graveyard Of Empires**

- **Terminology**: The Bronze Age, fallow, Neolithic, deforestation, crop rotation, cash crop, Phoenicians, Mayans, Old World, New World
- Locations: Central America, Greece, Athens, Sicily, Italy, Rome, Lebanon, Yucatán Peninsula, Peru
- Names: George Perkins Marsh

### **Chapter 5 – Let Them Eat Colonies**

- **Terminology**: Iron Age, radiocarbon dating, Black Death, yeoman, soil husbandry, Middle Ages, Industrial Revolution, famine
- Locations: Guatemala, Germany, Danbue River, Rhine River, Po River/Valley
- Names: James Hutton, Reverend Thomas Malthus

## **Chapter 6 – Westward Hoe**

- Terminology: slash-and-burn agriculture
- Locations: Carajás Plateau
- Names: Charles Lyell, U.S. Soil Conservation Service

#### **Chapter 7 – Dust Blow**

- **Terminology**: global warming
- Locations: Ethiopia
- Names: John Deere, Major John Wesley Powell, U.S. Geological Survey, U.S. Department of Agriculture, Soil Conservation Service, Wangari Maathai

#### **Chapter 8 – Dirty Business**

- **Terminology**: legumes, guano, phosphate, alkali soils, phosphorus, nitrogen, ammonia, monoculture, organic farming, no-till farming
- Locations: New Zealand
- Names: Walter Mallory, Eugene Hilgard, Norman Borlaug, Sir Albert Howard, Edward Faulkner, Rodale Institute

#### **Chapter 9 – Islands In Time**

- Terminology: Polynesia, soil escarpment
- Locations: Easter Island, Mangaia Island, Tikopia Island, Iceland, Haiti, Cuba
- Names: (none)

## **Chapter 10 – Life Span Of Civilization**

- **Terminology**: (none)
- Locations: (none)
- Names: (none)