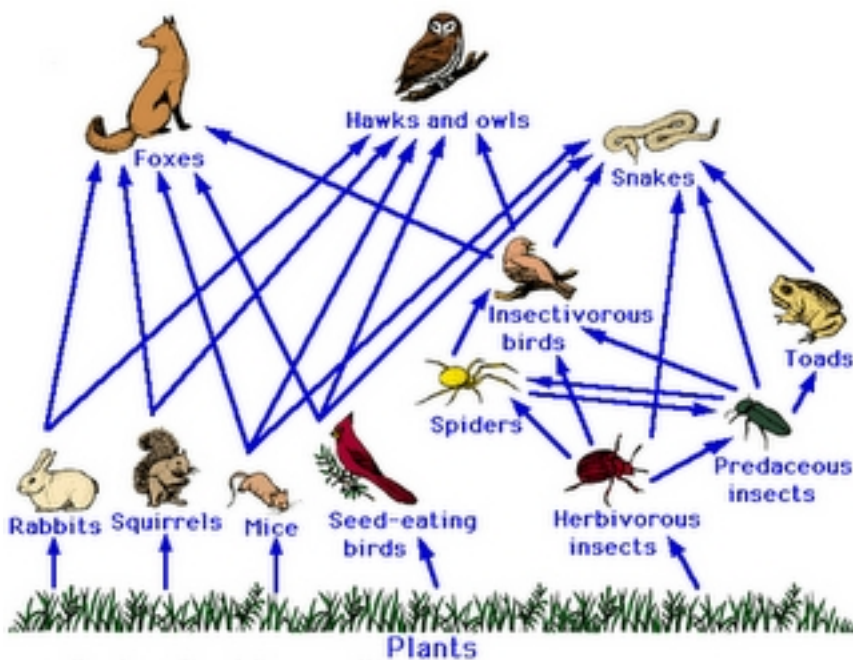


**Ecology** is the study of earth's living systems and how they interact. It is not environmentalism, a social and political movement. Ecology is one of the most complex sciences and is very new. As such we are only at the beginning of our understanding of how environmental systems react and how a change in one element might affect a whole system or one organisms in that system.

### Here's a timeline of ecology as a science:



- late 1700's Antoine Lavoisier, a chemist, discovered Oxygen and Carbon and their importance to living things
- 1852 Robert Angus Smith connected acid rain to air pollution
- 1869 Ernst Haeckel coins the term ecology
- 1875- Eduard Seuss defines the biosphere
- 1879 Symbiosis is first described
- late 1800's animal camouflage studied and described
- 1900 Henry Chandler Cowles studies ecological succession
- 1915 Ecological Society of America founded
- 1927 Charles Elton makes the concept of food chains and webs part of ecology
- 1933 Aldo Leopold writes *Game Management*, beginning the discipline of wildlife management
- 1935 The Dust Bowl crisis re-focuses ecology on practical land usage practices
- 1935 Arthur Tinsley defines ecosystem
- 1940's Ruth Patrick studied interdependence of organisms, particularly freshwater ecosystems. She developed methods to measure the health of a stream.
- 1950's People first become aware of the harmful effects of pollution on ecological systems and on people.
- 1951 Nature Conservancy is founded.
- 1953 Eugene Odum, Howard Odum wrote the first ecology textbook and ecology

becomes a university course.

- 1970's James Lovelock's idea of *Gaia*, that the whole earth is one living entity and will ensure its own survival even if humans destroy themselves
- 1972 Acid rain effects on lakes is discovered and studied by Harold Harvey
- 1978 Conservation Biology established as a discipline focusing on environmental management
- 1980's Scientists discover hole in the ozone over Antarctica
- 1980's Water pollution seriously reduced due to new sewage treatment practices
- 1980's Air pollution reduced in cities as unleaded gas and catalytic converters are used in autos