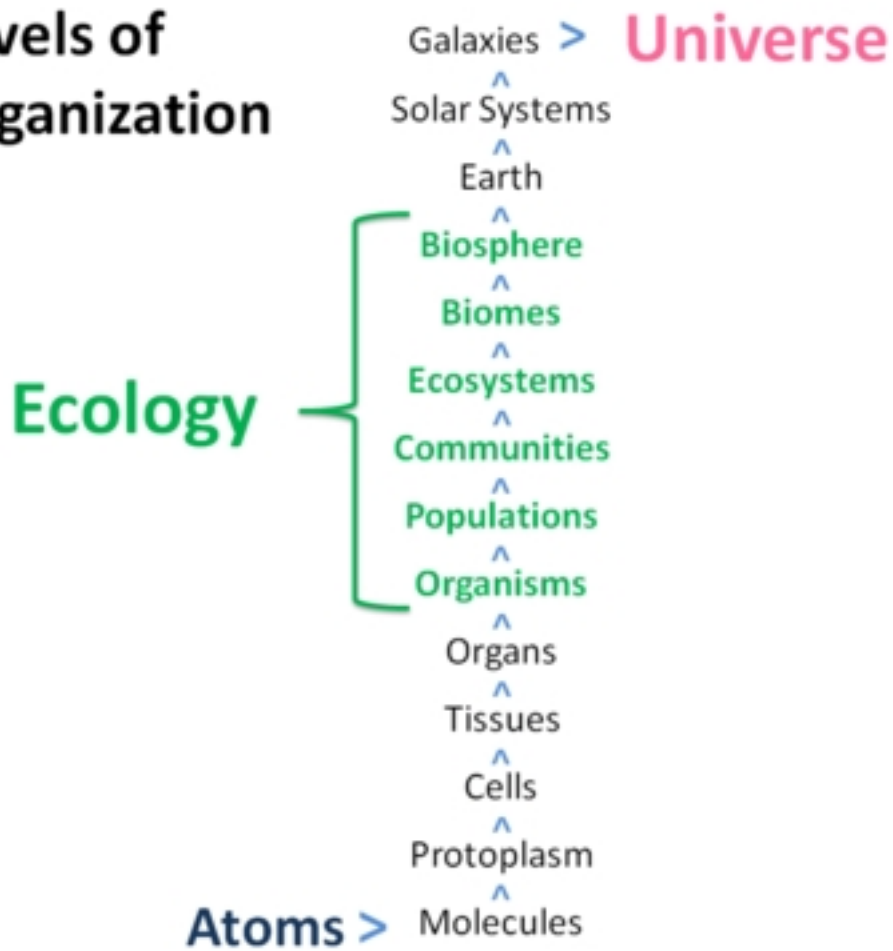


Ecology is the study of environmental systems, or as it is sometimes called, the economy of nature. "Environmental" usually means relating to the natural, versus human-made world; the "systems" means that ecology is, by its very nature, not interested in just the components of nature individually but especially in how the parts interact. Ecology is technically an academic discipline, such as mathematics or physics, although in public or media use, it is often used to connote some sort of normative or evaluative issue as in something is "ecologically bad" or is or is not "good for the ecology". More properly ecology is used only in the sense that it is an academic discipline, no more evaluative than mathematics or physics. When a normative or evaluative term is needed then it is more proper to use the term "environmental", i.e., environmental quality or "environmentally degrading". Most professional ecologists are not terribly unhappy when ecology is used in the normative sense, preferring the wider public awareness of environmental issues today compared to the widespread ignorance of three decades ago.

The subject matter of ecology is normally divided onto four broad categories: **physiological ecology**, having to do with the response of single species to environmental conditions such as temperature or light; **population ecology**, usually focusing on the abundance and distribution of individual species and the factors that cause such distribution; **community ecology**, having to do with the number of species found at given location and their interactions; and **ecosystems ecology**, having to do with the structure and function of the entire suite of microbes, plants, and animals, and their abiotic environment, and how the parts interact to generate the whole. This branch of ecology often focuses on the energy and nutrient flows of ecosystems, and when this approach is combined with computer analysis and simulation we often call it systems ecology. **Evolutionary ecology**, which may operate at any of these levels but most commonly at the physiological or population level, is a rich and dynamic area of ecology focusing on attempting to understand how natural selection developed the structure and function of the organisms and ecosystems at any of these levels.

# Levels of Organization



<http://www.eoearth.org/article/Ecology>