Eco-Res Forum – Exploring the Ethical, Political and Socio-Cultural Aspects of Climate Change April 2007 E-Conference (www.eco-res.org; posted with permission)

John Cairns' Posting #4 ECOCENTRICITY OR EXTINCTION? April 18, 2007

In my first posting (15 April 2007 on www.eco-res.org), I defined *ecocentrism* as being congruent with nature's design and conforming to natural law. This definition emphasizes that humans have no special entitlement. In short, all species must either fit nature's design/natural law or become extinct, as countless millions have done. Ecosystems are complex, multivariate systems that are constantly evolving. Some species either adapt or evolve - others become extinct.

Carrying capacity can be used as an example of natural law. Three examples of nature's design are helpful in understanding ecocentrism.

- 1. Few "wastes" exist in nature's design. Almost everything produced by one species is used by another species as a resource. In contrast, humans produce radioactive wastes (e.g., from nuclear power plants) that may take a million years to be assimilated by natural systems. Even then, these radioactive wastes may not be safe and will probably not be a resource to most species.
- 2. Most biotic communities have many species with few individuals per species. Stressed communities have many individuals and few species. In 1956, I published a paper on the effects of power plant heated wastewater discharges on aquatic communities -- rising temperatures changed an algal community from diatoms to greens and then to bluegreens. Many species consumed diatoms, but only a few consumed bluegreens. The food web had been simplified. Global heating seems to be having the same effect. Over evolutionary time, a new complex system may appear, but humans must survive the transition period.
- 3. Neither the universe nor Earth's biotic systems appear to have a sense of obligation toward the human species, so humans must co-evolve with natural systems or perish. I term this new relationship *ecocentrism*, but the label is not important -- the action is!

The little species that really run the Earth don't need humans. Humans are a threat to large life forms (e.g., polar bears). Millions of life forms were successful without humans for billions of years. Humans need these species (the biospheric life support system) -- they don't need humans. When humankind accepts this fact, it will be on the path to ecocentrism.

I often ponder why humankind fears admitting dependence on the biospheric life support system. Human egos would take a blow to admit they are not in control, but the illusion is to believe they are. How humiliating for the human species that at least one marine ostracod has lasted 40 million years, while humans might commit suicide in a century or two. However, the path to ecocentricity requires that humankind admit its dependence.