

Natural resources' universal pattern and sustainability

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Abstract. This presentation suggests a structure for a sustainable approach toward resource protection and management. Research reveals that there is a common asymmetrical pattern to the distribution of (probably) everything in the universe – energy, mass, space, time, dark matter and dark energy – all duplicating the simplest atom's distribution of mass. Nothing that I have examined contradicts that pattern. It appears to be a universal characteristic of Earth's planetary support systems, the major resources on which we depend, water, air, land, biomes and their biodiversity, and a means for understanding the impact of our tampering with the carbon cycle. The existence in all these support systems of essential *buffers* is a vital design element of sustainable resource management. Humans *violate* the pattern in our numbers where, according to the pattern and at the top of the food chain, we would occupy an infinitesimally small percentage of Earth's organic carbon. We unintentionally *emulate* the pattern in our culture, particularly economics and the interest/discount rate. We must apply the concept of the pattern intelligently to survive. Of immediate critical importance to Earth's highest organism is how its most successful and invasive species – *homo sapiens* – can restore and maintain Earth's ecological balances that have persisted over the eons resulting in our customs, rules, regulations, and laws enabling and constraining human behavior toward our resource support systems and each other.

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