

Letter to the Editor. Canowindra Phoenix. Feb 2019.

Once again I must congratulate Bob Sherwood on his enthusiasm for his topic, and also for giving me the opportunity to explain repeatable natural phenomena as ecology: The Science of Nature.

Bob is correct in his understanding and use of the word entropy, meaning to explain the phenomena of loss of momentum without an extra external force applied during the use of all manmade high maintenance mechanical, industrial or infrastructure inventions, for that is indeed so and of mechanical/industrial thinking as a paradigm.

However when experiencing and thinking in a more Nature centric paradigm, the inventions of Nature's own living creations as eco-systems, where all life is one self-organising, self-replacing, self-energising eco-system on Earth, the momentum of life on Earth is continuously supported by natural cycles and many internal forces simultaneously. This is Earth's single multipurpose ecosystem continuously working as the geology/hydrology and biology together. Nature is indeed a wonder worker. People as a single species have only a stewardship role to play ecologically, as each and every species has an individual ecological role to play, living together as one whole biological community.

Although Nature with the eco-logic of multiples of species together, has unlimited ecological understanding and potential, most people thinking individually are limited in their understanding of the natural world. Natural reproduction of soil, water, living species and energy is just the functional eco-system working as Nature uses eco-logic; that is the natural ecology. But when people as a single species use human logic, in a myriad of ways, disconnect the natural processes and cycles of the ecosystem that is not generally well understood, dysfunction of eco-system is the result of internal forces of life depleted, e.g. Species loss/water loss/soil loss.

In present day dysfunctional landscapes, erosion is the result of human induced loss of soil, water and species by the export of ecosystem resources, to another place. However, in functional landscapes, erosion and accumulating sedimentation are equal and opposite actions of the one function of land formation, only occurring in vegetation dense landscapes.

More local water as a liquid is condensed from air, rain and dew, through contact with relatively cooler surfaces such as the leaves of dense vegetation, surface water bodies or metal. Dense vegetation condenses more water from air, rain and dew than vegetation bare surfaces. Functional landscapes are 'driven', as a living heat engine, by evapotranspiration and energised by sunlight, as long as water, vegetation and sunlight are present. Recharge to ground water only occurs in functional landscapes not from manmade whole of landscape 'water sheds'.

Ecosystem function, while ever water, vegetation and sunlight are present, is perpetual motion on the surface of the Earth, not readily recognised by people.

In our present day most of our urban and farm lands and the Murray/Darling stream valley catchment system, are dysfunctional eco-systems due to human intervention and the application of technology to make money, rather than the application of ecology to increase soil, water and living species as occurs in natural systems.

A paradigm shift in thinking now in our present day, is enabling enlightened Nature aware people to use many regenerative methods of farming in Australia. They don't waste their money and are showing many ways to harness Nature to benefit all species present, not just people. Only Nature as

a whole, using multiples of species that are living, dying, decaying and living once again, is able to accumulate eco-structure and increase soil, water and living species of microbes, plants and animals together as viable biological communities, where people live too.

Throughout Australia today we can all celebrate both the roll out of Regenerative Farming across Australia, initiated by Nature aware farmers and celebrate the extinction of Industrial Agriculture invented during the last two hundred years by a Western Civilisation, over saturated with money.

As a co-author of the roll-out of Regenerative Farming across Australia, I hope an invitation to visit Western Australia to promote this new way to farm Australia will give an opportunity for more explanations and demonstrations of the wonders of Nature working on farm. And to meet Bob whose interest and letters I appreciate. Thanks.

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