

Talking Conservation

Drie Valleyen

THINK LIKE A MOUNTAIN

by **Charl van der Merwe, Pr.Sc.Nat. On behalf of Sedgefield Ratepayers & Residents Association**

Aldo Leopold (1887-1948) was one of the foremost American wildlife conservationists of the 20th century. His book, *A Sand County Almanac* (1949), was read by millions, and strongly influenced the budding environmental movement of the time. His philosophical dialogues on man's place in the environment are still read today. Aldo Leopold was not the first conservationist, but his focus on the importance of the interconnected systems within nature broadly informs the most prevalent understanding of the natural world today. He pioneered the "land ethic" as a basis for how humans should regard the land we live in.

In his essay "Thinking like a Mountain" Leopold reflects on an old wolf he shot and killed as a young hunter. Wolves were seen as vermin at that time and hunted to near extinction. He described how he reached the wolf in time to watch a fierce green fire dying in her eyes and realised that there was something new to him in those eyes, something known only to her and the mountain. He thought that because fewer wolves meant more deer, no wolves would mean "hunters' paradise." But then he acknowledged that, after seeing that green fire die, he sensed that neither the wolf nor the mountain agreed with such a view. He realised that wolves play a critical role in maintaining the balance between prey and the vegetation in the forest and other natural habitats.

Leopold invited humans to think like a mountain by taking a

long-term view of ecology, including the value of predators and the pristine natural bio-networks. He envisioned a mountain stripped of vegetation by the deer, the white bones of the deer succumbed to hunger strewn on the mountainside, rivers murky with mud, and the sides of the mountain scarred by erosion gullies. Leopold suspects that just as a deer herd lives in mortal fear of wolves, so does a mountain live in mortal fear of its deer and the other species in fear of losing its vegetation. But the difference is that a deer pulled down by wolves can be replaced in a year or two whereas a mountain scarred by too many animals may fail to recover in many decades.

The same principle applies to mountains today. Alien invasive vegetation is stripping our mountains of indigenous fynbos that protects them from erosion. A diverse fynbos biome that supports a unique collection of insects, reptiles and mammals provides a consistent supply of ecosystem services.

These services can be grouped into four main groups viz.

- 1) Support services such as soil formation and nutrient cycling
- 2) Cultural services such as aesthetic and spiritual values, recreation and ecotourism.
- 3) Food, clear water and medicinal raw material
- 4) Regulating air quality, pollination, moderation of extreme events, water and erosion.

Without these services, the mountain and everyone else will be deprived of livelihoods, health and well-being.

We should think like a mountain in terms of environmental concerns. A quote from

Leopold's now-famous essay sets the tone: "Only the mountain has lived long enough to listen objectively to the howl of a wolf." Leopold's essay depicts the long-term ecological impacts of killing a wolf and the consequences of a trophic cascade, (powerful indirect interactions that can control entire ecosystems). This is true of our environment today where plant invaders wipe out natural plant communities established long before man.

Leopold's holistic view of an entire ecosystem and the necessity of preserving "the integrity, stability, and beauty of the biotic community" is not a romantic notion, but the only solution for our sustained place in nature. The primary element of his essay is that only the land can understand the true significance of an individual and its role in the ecosystem. Leopold tried to tell us the importance of every living species in nature and our ecosystem. If any species – or a component of the ecosystem – is absent, the probability of an imbalance in such a system will be high.

As we have distanced ourselves from nature, Leopold's advocacy for a strong need for a land ethic is even more applicable today. We use our environment as an infinite sink to absorb our waste. We are polluting our air, poisoning our rivers, impoverishing our indigenous flora, contaminating our soil, and fouling our ocean with selfish actions.

There is no doubt that Nature is losing ground through our actions. But when we think like a mountain, we will have clean air and water, forests will thrive, and nature will be abundant.