How Copying Nature Can Stop Desertification In Its Tracks

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South Africa: Land on the left managed under Holistic Planned Grazing showing a contrast with advancing desertification

The challenge of desertification is becoming more real and brutal by the day, with the associated serious issues of global climate change, poverty, famine, drought and violence. Millions of people are suffering around the world. Traditional methods that have been employed through the decades to stem desertification and revive degraded grasslands have fallen short of the desired results.

However, there is a scalable, cost-effective, nature based solution – and has been for more than 40 years. A practice called Holistic Management, pioneered by Allan Savory of the Savory Institute, has demonstrated remarkable results in restoring depleted grasslands around the world. This holistic approach to land management uses properly managed livestock to bring land and water back to life, create social and economic benefits, reverse desertification and mitigate climate change.



VIDEO: A short animation shows how Holistic Management works

Nature provides the model for Holistic Management. In the past, large wild herds of herbivores such as caribou and buffalo migrated over these types of grasslands to find food and avoid predators. These herds grazed, defecated, stomped and salivated as they moved across the grasslands, building soil and deepening plant roots. Unfortunately, over time, the wild herds disappeared and were replaced by small numbers of domestic, sedentary and mismanaged livestock.

Without the timely stomping and excrement of large numbers of animals, the cycle of biological decay in these grasslands was interrupted and the once-rich soils turned into dry, exposed desert land. This dry,

bare desert land dramatically decreases the effectiveness of rainfall because water evaporates or runs off instead of soaking into the soil. This increases the frequency and severity of both floods and droughts even with no change in rainfall in a specific region. What is even worse is that this dry, infertile, bare soil is unable to store carbon, releasing it into the atmosphere.

Using properly managed livestock can create environmental, economic and social benefits

We need to restore the land's natural balance – and to do this, we must acknowledge that nature is complex. It functions in wholes. Holistic Planned Grazing is a formal planning procedure that honors and is able to accommodate nature's complexity in the strategic

management of herbivores.

If livestock are properly managed to mimic the behavior of wild herds in the past – they can heal the land, bringing back water, and creating food and economic stability for entire regions. The soils of these revitalized grasslands represent a sizeable natural carbon sink that will sequester carbon into the soil and store it as stable humus helping revert the climate trends we experience today.

The <u>Africa Center for Holistic Management (ACHM)</u> in Zimbabwe is using properly managed livestock under Holistic Management to improve land health, and empowering pastoralists in the surrounding villages to do the same. Results have been impressive, with water returning to creeks that have been dry for many years, crops strategically grown in areas "treated" with livestock are producing three times the average yields, wildlife is beaming, and people are once more hopeful.

This holistic approach is successful because it is cost-effective, highly scalable and nature-based. It is sustainable because it is culturally appropriate, increases land productivity, livestock stocking rates and well-being, without compromising the long term viability of the resource base.



Daniela Ibarra-Howell co-founded the Savory Institute and became its CEO in 2011, bringing over 20 years of experience working on desertification and land degradation issues. Daniela has practiced and taught holistic management to successfully heal grasslands and meet economic and social goals in many different regions of the world, including the US, Argentina, Mexico, and New Zealand.