

The Business Of Farming: Veld Management Tools

It is not the situation but what you do about it that determines the future

By S. D. Parsons

In my last article I discussed the State & Transition theory and its application to veld management. In essence that theory contends that many potential veld types, or states, can occur in a particular environment, or on a given farm. The occurrence of a particular state, for example heavy bush, bare ground, annual grasses, climax grasses and various combinations depends upon previous climatic conditions and managerial activities.

We are all well aware that the state of the veld in communal areas is quite different from that on commercial farms, which again differs from that in the national parks. In addition, fence line contrasts between neighbouring farms and even adjacent paddocks show just how important management influences are.

So what do we mean by 'management'? In this sense management is the application of different tools to a particular piece of veld under various climatic circumstances. In effect those tools are the application of energy forces. For example mowing is an energy tool, as is fertiliser, fire, irrigation or the mere presence of a herd of cattle. For practical purposes we can divide these energy tools into two broad groups, viz. those which are renewable and those which are not.

Non-renewable energy sources include all those derived from fossil fuel sources. That includes anything mechanical and anything chemical. Non-renewable in this sense means that once it is used it cannot be used again. For example petrol or diesel once burned is gone forever. Of course, a tractor can be used again and again, but eventually it depreciates and is completely used up.

In contrast, renewable sources of energy can be used repeatedly without being depleted. The use of a herd of cattle is a case in point. Cattle, and other large bodied animals, are in effect nature's farmer pruning, fertilising and cultivating as they move. The way those animals move, and in what concentration, has an enormous impact on the veld. A single animal quietly grazing on same piece of land year in and year out has a very different effect from a large compact herd on the move.

An anonymous writer once said that, '*Modern man has walked across the face of the earth leaving a desert in his footprints*'. Sadly, my observations in many parts of the world support that contention. It's not that livestock producers don't care about the state of their veld, it's just that they are generally unaware of the impact that their actions have on veld.

While non-renewable energy tools do have an important remedial role to play under certain circumstances it is the way that herds are managed that ultimately decide whether veld will be in a desirable sustainable state or not.

Over the years I have concluded that there are five key principles in the use of livestock to achieve and maintain a desirable state. In order of importance they are:

- Adequate physiological rest once a plant has been defoliated by grazing burning or mowing.
- Fluctuating stocking rate so that it is in synch with carrying capacity both within and between years.
- Short graze periods (not more than three days) to avoid too frequent a bite and most importantly to ensure a high plane of nutrition for the livestock.
- Physical animal impact to trample old vegetation and cultivate the soil.
- High stock density to ensure uniformity of utilisation.

Before man domesticated animals some 10 000 years ago veld did very well without farmers and pasture scientists to keep it in order and make it thrive. Destruction and desertification

only occurred with man's intervention. As Allan Savory pointed out 40 years ago, large bodied animals that physiologically shock a plant when they take huge mouthfuls move in herds. They graze and move on before returning days, weeks or months later to graze again.

It is not the wild animals per se, but the herd impact and the herd's migratory pattern that is the key factor. That said, I believe we will see the veld deteriorate on those farms that have replaced cattle with wildlife. The areas and the herds are far too small to simulate the pattern that existed originally. Ironically, if the veld on those farms is to be maintained in good nick it will be through the judicious use of cattle as a tool.

When I first met Savory some 30 years ago I was very sceptical about his beliefs and theories. The intervening years and experience of working with farmers from the frozen prairies of northern Canada to the deserts of central Australia have shown that there is much sense in what he says about veld management. Savory and I differ in degree, as do many of the people like Johann Zietsman who follow those practices. However, I applaud the people who have the courage to get out there and try rather than carping from the sidelines while their veld deteriorates. It is only through this process of trial and error based on sound logic that we will make progress.

Interestingly ranchers who use the herd as a tool to manage their veld have experienced benefits other than improved veld. Concentrating herds results in lower labour costs (important when one is paying in excess of US \$15 an hour) and improved livestock performance. Rather than being widely scattered the concentrated herd means animals are seen regularly and are more easily attended to.

The headlines in the May, 2000 issue of the Australian Farm Journal reads, *Ten years on: cell grazing lifts profits and sustainability*. If it can happen there why not in the country where the technique originated?

Dr. Parsons is in the business of putting profit into small businesses. His latest book is called "If You Want To Be a Cowboy, Get a Job". Box CH 967 Chisipite. Tel/Fax 04/495532 e-mail: Derryfarm@zol.co.zw www.ranchmanagement.com