

GROWING GRAZING GRASS Part 2: about the grasses

In Marloth Park we must have food that supports grazing warthog, zebra, wildebeest and antelope. So:

WHAT IS GOOD GAME GRAZING GRASS?

We supply our “Marloth Mix” grazing grass to property owners keen to rehabilitate the overgrazed veld and support our animals with natural food. But what is good grazing? Why did our expert choose the four grasses in our mix? (All locally indigenous species.) Here is a basic introduction to grazing grass.

Grazers need grass that is 1) digestible, 2) palatable and 3) nutritious.

If any of these are not present, they will not be able to, or will only as a last resort, eat such grass. Some grass is simply inedible to them. This is why we see some areas with more grass than others at the end of winter. The grass that is left is unsuitable food.

DIGESTIBILITY: Digestible grass does not have high levels of structural carbohydrates like lignin and cellulose, or high levels of chemical substances such as tannins. These features hinder digestion.

PALATABILITY: Grasses have evolved defences such as thorns, hardness/fibrousness, repellent substances or volatile oils that make them unpalatable. That is, they cannot be eaten. A good example many of us may know is ‘turpentine’ grass. It is high in nutrition but the smelly ‘turpentiney’ oils make it unpalatable.

NUTRITIOUSNESS: A grass with good nutritive value has plenty of minerals, protein and non-structural carbohydrates. If the available grazing has too few of the right minerals it means, for example, weak bones and teeth.

Regarding protein, grasses that grow under pod-bearing trees, like the *Panicum maximum* in our mix, are high in protein. This is because the tree roots bring nitrogen to the surface and the soil is enriched by the compost.

In times of drought protein in grass drops, leading to grazers losing a lot of condition. Non-structural carbohydrates are important because when they ferment, they make fatty acids, which are a source of energy.

GOOD GRAZING HAS PERENNIAL, CLIMAX GRASSES

A good grazing grass is also a perennial, able to live for at least two years. It can reshoot quickly in summer. It is known as a 'climax' or 'sub-climax' grass. These remain nutritious longer, have strong root systems, and provide better ground cover.

However, overgrazing hinders new root development and kills these good grasses. Then, a less suitable grass moves in. It is usually an annual grass.

DECREASERS AND INCREASERS; PIONEERS; ANNUALS

Good palatable perennials are usually what are termed 'decreasers'. This means they dwindle in number as they are overgrazed. Then, a pioneer 'increaser' grass moves in. Increaser grasses are less suitable as grazing.

Annual grasses last only one season. Annual pioneers are the first to grow in poor soils and disturbed areas. Once soil is stabilised and enriched with vegetative cover and organic matter sub climax, perennial grasses naturally come in.

Then, if veld is well managed, not overgrazed, climax grasses establish. Many of these are the best grazing grasses, such as *Panicum* and *Digitaria* species.

CURRENTLY: SOW ANNUALLY

In Marloth currently most of our grass never gets to produce seeds. This is due to overgrazing. So we need to sow new seeds every year to help our veld provide food. We are doing this on parkland, and many concerned residents are doing it on their own properties: thank you!

However, as always, we ask you to *only ever use locally indigenous species*, if you don't buy from us.

Our goal is to have animal numbers, and the veld they depend on, better managed. We must establish a good, stable mix of grazing grass, as in the attached table.

Sources:

Guide to the Grasses of Southern Africa, Fritz van Oudtshoorn, Briza Publications, 2012.

Grasses of Kruger National Park and Surrounding Bushveld, Veronica Roodt, Graffiti Books (available in English and Afrikaans) 2013.