

Veld management **AFTER** **DROUGHT**

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It is understandable that farmers want to stop the drought feeding and return the livestock to the veld soon after drought-breaking rains. However, self-control is now important. For the sake of the future health of the veld, it is better not to discontinue the drought feeding program or to start increasing the herd size too early. If the veld does not recover properly after the drought, its sensitivity to and tolerance of future droughts will be severely compromised. Don't fall into that trap.

The greater the damage to the vegetation during the drought, the longer it will take to reclaim it. Veld that was in a good condition when the drought started, will recover much quicker and better than veld that was in a poor condition at the start of the drought (compare the photos in Figures 1.1 and 1.2). This again emphasizes the importance of good veld condition as a measure to increase the farms drought tolerance and to decrease its drought sensitivity.

There are usually two components of the veld that need to be recovered - the plants that have survived the drought and the newly emerging plants.

PLANTS THAT SURVIVED THE DROUGHT

Plants make use of their stored-up reserves during regrowth. In the

case of grasses, these reserves are stored in the roots. Shrubs on the other hand, have a dual reserve system - some of the reserves are stored in the twigs and stems of the above ground portion of the plant, while another fraction is stored in the roots.

These reserves are used to produce the first flush of green leaves, which the plant uses for photosynthesis. Once the plant has a sufficient leaf area to fully meet its growth requirements via photosynthesis, the plant will stop using the reserves. If the plants are defoliated sooner than when they can fully meet their growth requirements via photosynthesis, they will keep on withdrawing reserves from their reserve stores. After a severe drought the plants' growth reserves are usually low and if it is then forced to withdraw too much reserves from this already



FIGURE 1.1: To the left is veld in a good condition that recovered quickly after a drought. On the right is a paddock that had to be grazed directly after the drought and which would need special treatment at a later stage to reclaim the resultant “damage”.



FIGURE 1.2: Veld in a poor condition that is recovering slowly after the drought. This photo was taken on the same day as the picture in Figure 1.1 – just on opposite side of the road dividing the farm.

compromised reserve sink, there is the possibility that some of the plants that have survived the drought, will die after the drought is broken, resulting in a much reduced future grazing capacity. Research conducted in the Eastern Cape demonstrated that veld that was grazed too soon after the drought was broken, recovered much slower to its pre-drought condition than veld that was allowed to recover fully. This difference was still noticeable three years later (<https://www.tandfonline.com/doi/abs/10.1080/02566702.1988.9648145>).

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NEW GENERATION OF PLANTS

The plants that have succumbed to the drought must be replaced by new plants to return to the pre-drought plant cover. The new generation of plants either comes from seed that germinated and established and/or from vegetative propagation in the form of underground rhizomes or above ground runners. Seedlings and above ground runners are vulnerable to defoliation for as long as it can be pulled out of the soil by grazing animals. For this reason the veld must be grazed very carefully during this phase of recovery.

BEST GRAZING PRACTICES AFTER THE DROUGHT

It is not wise to increase the herd size too quickly. The goal should be to recover the veld first and then start recovering the herd to its original numbers.

- The best option is to try and keep the animals on non-veld resources for as long as possible after the drought was broken, i.e. planted pastures, etc.
- If the first option is not available, start off by grazing those veld types that are the least susceptible to grazing, while giving the more vulnerable and valuable veld types an opportunity to recover. Normally less susceptible veld types would be mountains and ridges, and paddocks with a large proportion of less palatable plants on shallow and rocky soils. If no such veld is available, select a number of paddocks and “sacrifice” them while resting the rest of the farm to full recovery. The damage done to these paddocks during the recovery phase should then be recovered at a later stage by giving them special treatment, for example, a full season’s rest.
- The worst scenario during the recovery phase is to throw open the gates and allow the livestock to graze indiscriminately everywhere on the farm. Livestock are selective in their grazing habits and will therefore graze the more palatable plants and plant parts first! The result will be damage to specifically the

more palatable plants while they are not yet fully recovered, and the livestock will waste a lot of energy chasing after these plants.

- Return to the normal grazing system as soon as the veld has recovered fully. If there was not a good rotational grazing system in place on the farm before the drought, it is now a convenient time to start with one (and not during the drought).
- Bear in mind that undesirable woody plants will also use the favourable conditions after the drought to increase their numbers. Be aware of this. Start to eradicate them while they are still young as they are much cheaper to eradicate than the adult plants.

WHEN CAN VELD BE REGARDED AS RECOVERED AFTER THE DROUGHT?

Indicators of the state of recovery of veld are (1) plants that are actively photosynthesizing and are no longer dependent on the growth reserves, (2) the new generation of plants is well established and can no longer be pulled out of the ground by hand and (3) the more palatable grasses start to produce seed.

This is an abstract from the book “Smart drought management for livestock farmers” by the author. It is published by Kejefa and can be ordered from the following website address (also available in Afrikaans) <http://www.kejefa.com/smart-drought-management-for-livestock-farmers-745397.html>