

NORTH WEST DEPARTMENT OF AGRICULTURE AND
RURAL DEVELOPMENT
AGRICULTURAL SUPPORT SERVICES

PRINCIPLES OF VELD MANAGEMENT

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Introduction

- Primary source of fodder
- Good veld cheapest form of fodder if it is in a good condition
- Production influenced by climate and utilisation
- Veld is a natural resource that need to be managed for sustainable farming

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Aim of Veld Management

- Optimum animal production
- Optimum veld production

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Principles of Veld Management

- Stock veld according to grazing capacity



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What is Grazing Capacity

- Relative good veld produces $\pm 438\text{kg DM/ha/year}$ ($1\text{ ha} = 10\,000\text{m}^2$)
- 1LSU needs 10ha to stay in good condition ($4380\text{kg} \div 438\text{kg} = 10$)
- 1 LSU (cow of $\pm 450\text{kg}$) needs 4380kg dry palatable grass/year to stay in a good condition

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What is Overstocking?


- Farm size = 3000ha
- 1 LSU needs 10ha/year
- $3000\text{ha} \div 10\text{ha} = 300\text{ LSU's}$
- If 500 LSU's are carried on the same farm
- $3000\text{ha} \div 500\text{LSU} = 6\text{ha/LSU/year}$
- each LSU only receives 60% of the required area

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Results of Overstocking



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Results of Overstocking (cont.)



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Veld Rest

- Why?
- Grass plants need to recover to:
- Produce leaves
- Reproduce (shed seed)
- Store nutrients for re-growth

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Correct Grazing Capacity & Rest

- New seedlings develop and grass cover improves



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Correct Grazing Capacity & Rest

- Composition of veld improves

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Correct Grazing Capacity & Rest

- Production of veld improves (plenty food for animals)



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Correct Grazing Capacity & Rest

- Little water run-off

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Correct Grazing Capacity & Rest

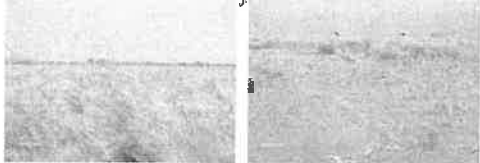
- *Optimum animal production*



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Overstocking & No Veld Rest

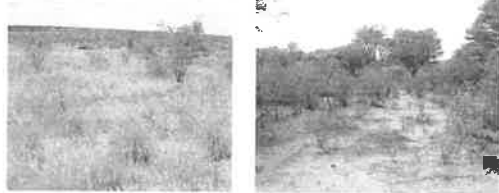
- *Four new seedlings, large patches, rest areas*



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Overstocking & No Veld Rest


- Composition of veld deteriorates



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Overstocking & No Veld Rest


- Grass tufts become small & unproductive (not enough food for the animals)



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Overstocking & No Veld Rest


- *Increased water run-off*



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Overstocking & No Veld Rest

- Poor animal production



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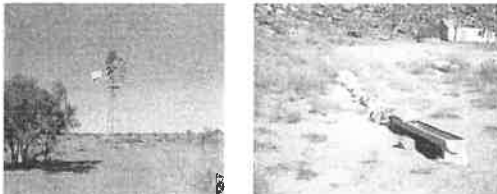
Veld Management Systems

- Veld needs to be grazed and rested according to a specific plan

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What is needed to implement a management system?


- Watering points



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What is needed to implement a management system? (cont.)

- Fencing



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What is needed to implement a management system? (cont.)

- Good cooperation between farmers
- Knowledge of veld and veld management



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Two types of Veld Management Systems

- Continuous Grazing
 - Manipulate grazing through watering points
 - Summer & Winter grazing areas
- Rotational Grazing
 - Multi-camp system
 - Rotate between camps (rest periods)
 - Summer & Winter camps

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Multi Camp Systems

- Based on rotation & rest
- Higher in cost & maintenance

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Rational Grazing: Two Camp System

- Divide the veld in 2 equally sized camps
- Year 1 – Camp 2 rest in growing season
- Year 2 – camp 1 rest in growing season

CAMP 1
SEPT - FEB

↓

CAMP 2
SEPT - FEB

CAMP 2
MARCH - AUG

↓

CAMP 1
MARCH - AUG

YEAR 1

YEAR 2

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Rational Grazing: Three Camp System

- Divide the veld in 3 equally sized camps

CAMP 1
SEPT - FEB

↓

CAMP 3
SEPT - FEB

↓

CAMP 2
SEPT - FEB

CAMP 2
MARCH - AUG

↓

CAMP 1
MARCH - AUG

↓

CAMP 3
MARCH - AUG

CAMP 3
REST
365 DAYS

↓

CAMP 2
REST
365 DAYS

↓

CAMP 1
REST
365 DAYS

YEAR 1


YEAR 2

YEAR 3

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Conclusion

- Stock farm according to grazing capacity
- Allow veld to rest and recover
- Allow stock to utilise only palatable & less palatable grass species - leave the unpalatable specie



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