

NORTH WEST DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT AGRICULTURAL SUPPORT SERVICES

DISTANT MANAGING OF VELD
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**Agriculture &
Rural Development**
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- Managing your grazing when it is not far away is easier, because you can visit your veld regularly or go there quick when you suspects that there might be a problem.

- But what if your farm or grazing is, let's say 400km away?



What to do.

- Familiarise you're self with each camp regarding:
 - ❖ the grass component – indicator species per season (see what animals are grazing most). Longer walks with camp visits
 - ❖ history of the camp, e.g. previous season

- Make a plan – the Fodder Flow Plan (FFP)



Definition of Fodder Flow Planning (FFP)

- Provision of grazing for the whole year to every group,
- according to their needs,
- by using all grazing resources,
- with optimum use of resources as the aim of pasture science, and
- optimal animal production as end result for animal science

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What do you need?

- The breed type: divided into small, medium and large frames, e.g. Nguni = small frame Simmentaler = large frame.

Why?

Different frames have different LARGE STOCK UNIT (LSU) equivalents
e.g.

Nguni	LSU	Simmentaler	LSU
Lactating Cow - summer	1.335	Cow - summer	1.91
Dry Cow - winter	0.576	Cow - winter	1.19
Repl heifer - s	0.772	Repl heifer - s	0.75
Mature bull - s	1.64	Mature bull - s	2.05



- Get the different groups on the farm as well as the number of animals per group.
- The camp sizes in hectares and also the grazing capacity per camp (if available, otherwise get the average from the national grazing capacity map from the local Agricultural Advisor).

Grazing capacities mostly differs between camps due to differences in grass species composition caused by things like differences in soil types or historical managerial problems.

- How is the grazing seasons divided: e.g. in the western parts of the province: summer grazing period is from 15 Jan. until 15 July and winter is from 16 July until 14 Jan. Rain comes later.



Determine the needs:

Calculations:

You need: number of animals (every group) \times LSU \times period = ?
Large Stock Unit Grazing Days (LSU GD)

e.g. Nguni breed, cow group 1 (35 heads) for summer (lactating for 137 days)

$$35 \times 1.335 = 46.725 \text{ LSU's} \times 137 \text{ days}$$
$$= 6\,401.325 \text{ LSU GD}$$

NB: if you only use the number of animals and not the LSU to determine the need = 4 795.0, you're animals will be under fed and suffers.



Examples of other groups on Melton LIC: (from 2020 FFP)

Bulls summer

Group	Heads	LSU eqv.	LSU	Days	LSU GD
Breeding (BB)	6	1.64	9.84	183	1 800.072
Phase D they become old phase D	26	0.68	17.68	137	2 422.16
Old phase D they become Distribution	26	0.79	20.54	46	944.84
New weaning bulls	15	1.13	16.95	183	3 101.85
Oxen	39	0.4046101	15.780	46	725.880
Total	27	0.79	21.33	183	3 903.39
					12 898.192

Bulls winter

Group	Heads	LSU eqv.	LSU	Days	LSU GD
Breeding (BB)	6	1.51	9.06	182	1 648.920
Old phase D	26	0.79	20.54	182	3 738.280
Distribution	15	1.51	22.65	137	3 103.050
New weaning bulls	39	0.4046101	15.780	182	2 871.960
Total					11 362.210



The Resources

Calculations:

E.g. 1) You need: Size of camp in hectares and grazing capacity

e.g. Camp V 20 = 145 ha & 11 ha/LSU.

$365 \text{ days} \div 11 \text{ ha/LSU} \times 145 \text{ ha}$

= 4 811.36 LSU GD available.

E.g. 2) Camp V 17 = 138 & 13 ha/LSU

$365 \text{ days} \div 13 \text{ ha/LSU} \times 138 \text{ ha}$

= 3 874.62 LSU GD



Now you have the:

- [needs of every group in LSU GD]

With the total need available, one can determine your farm's stocking rate: e.g. 70 537.504 LSU GD ÷ 365 days

= 192.725 LSU

3 577 ha (total of grazing area) ÷ 192.725 LSU

= 18.560 ha/LSU for 2020

- [the available grazing, also in LSU GD]

Next step?



Camp allocations

IMPORTANT.

- Identify Priority groups, e.g. face D bulls / animals in trial
- How many cow mating groups
- Prevent bull clashes: allocate area away from cows
- Different bull groups at different times, e.g. old phase D bulls become the distribution bulls \pm end of May
- Give a bit more than the need – droughts, water/fence problems



Method: balancing act

- Identify camps and how many you want to give to which groups.
- Divide type of camps (good, medium or poor) between e.g. The cow groups – one group not receiving all the good camps
- Add the available LSU GD of the camps for a group together until the total exceeds the LSU GD need of the specific group.



Example

Cow group 2: total need = 11 604.508 LSU GD

CAMP NR	LSU GD	FOLLOW	COMMENTS
V 19	3 090.33	4	
V 9	2 944.93	2	
V 15	3 165.03	1	
V 8	3 165.03	3	
TOTAL	13 044.320		



Implementation

- Beginning of season – 15/01 (west), groups into the allocated camps
- **Evaluation of grass production – camp visits, by using specific technique with season's indicator grass species. Divided into classes: e.g. 10 % production = L-, 60% = M +. Tool used for distant managing.**



Example of Low + (L+) ,
= 30% production –
summer indicator



Example of High
(H) class = 80%
production –
winter indicator



Implementation, continuous

- On return, determine amount of grazing days for each group available as per following table:

Allocated to group	Camp #	Total LSU GD ♣	X Last production estimation: 13 – 14 /01/2020	LSU GD thus available	÷ LSU of group	= Grazing days availa
Cow gr 1	V 18	3 598.950	10% = 0.10	359.895	73.78	5
	V 16	2 944.330	20 = 0.20	588.866	(35 cows)	8
	V 7	3 037.410	20 = 0.20	607.482		8
	V 14	4 411.74	20 = 0.20	882.348		12
						33

- With the amount of grazing days available, it gives you peace of mind – the animals will be okay for e.g. 33 days.



Implementation, continuous

- Shifting of animals – planning done on a form, instruction can be done via SMS as in Melton, also a reminder with alarm on cell phone.
- Evaluation & adaptation of FFP – doing it right through the duration, note any changes/problems either on planning form or FFP for future references.

CONCLUSION:

A Fodder Flow Plan in place can give you peace of mind, but without good veld management throughout the year, its worth nothing.

I THANK YOU

