NORTH WEST DEPARTMENT OF
AGRICULTURE AND RURAL DEVELOPMENT
AGRICULTURAL SUPPORT SERVICES

Evaluation of the grass species composition, production and utilisation percentages in the Nguni Project

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Nguni Farmers Day, 26 November 2020

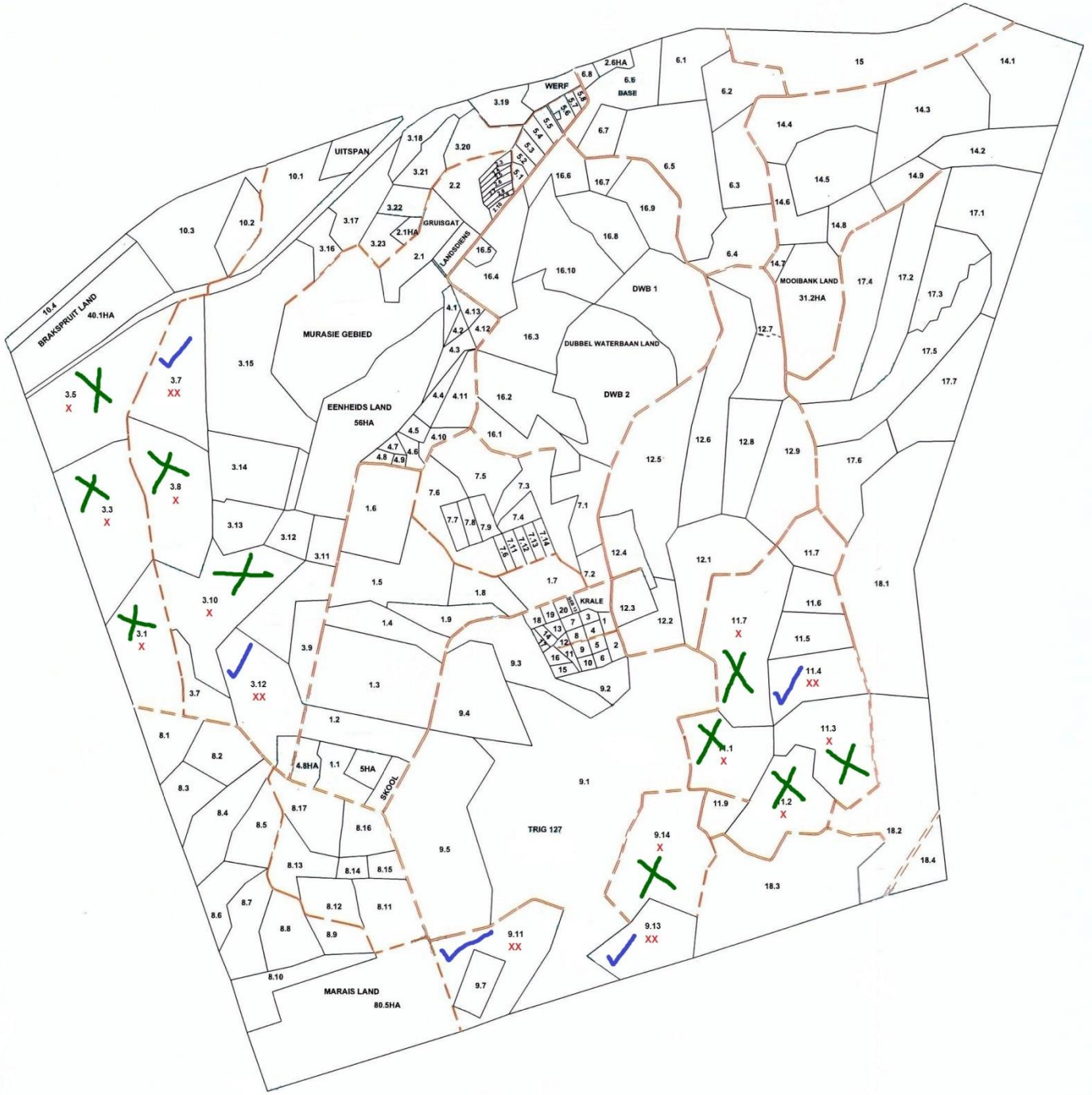
Agriculture & Rural Development
Department:
Agriculture and Rural Development
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

2030 NDP

Objectives

- Changes in the grass species composition due to the continuous grazing system applied
- What is the effect of the continuous grazing system on the grass production?
- Is it possible to calculate the utilization percentages?

ACTION PLAN



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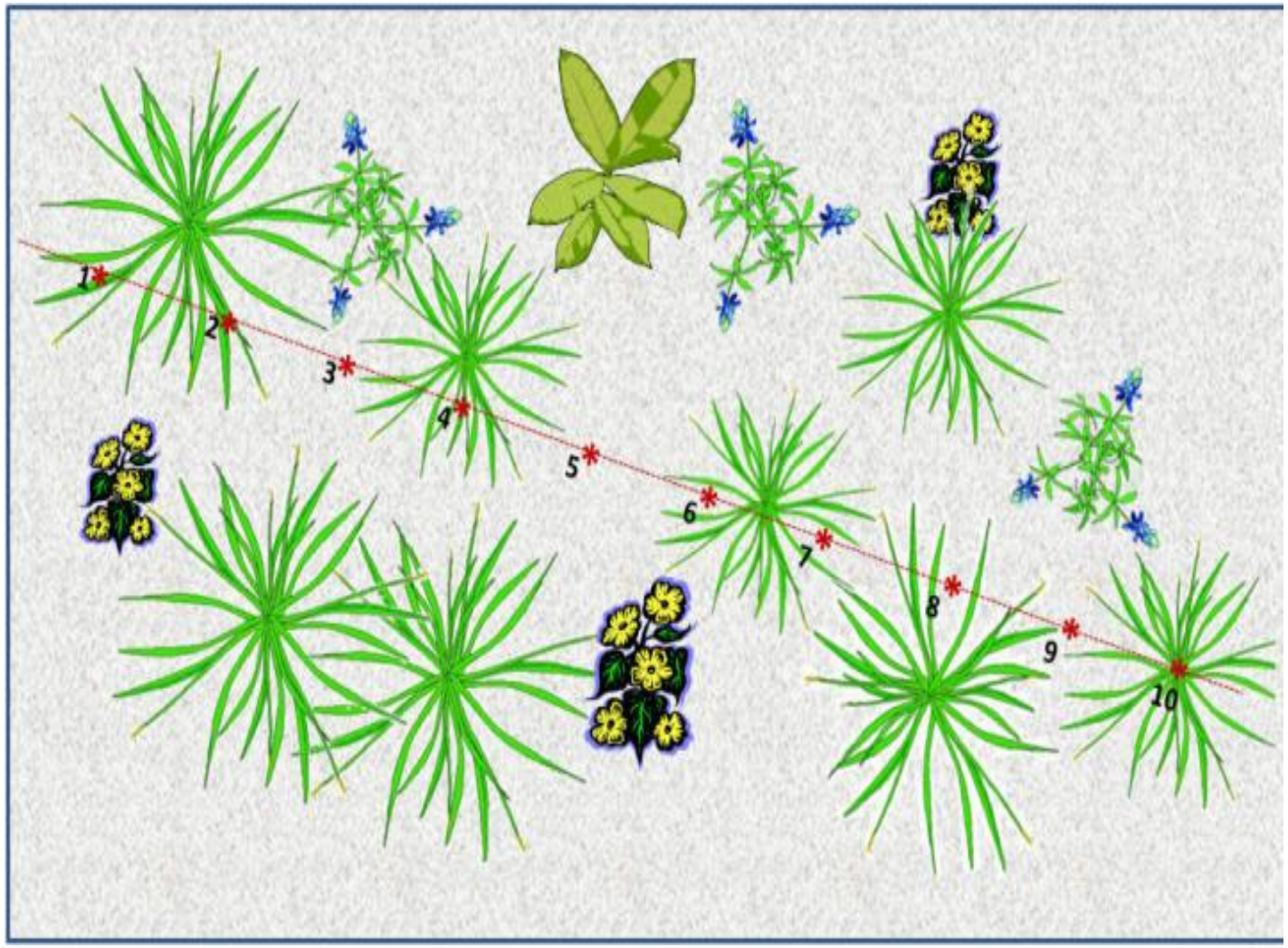
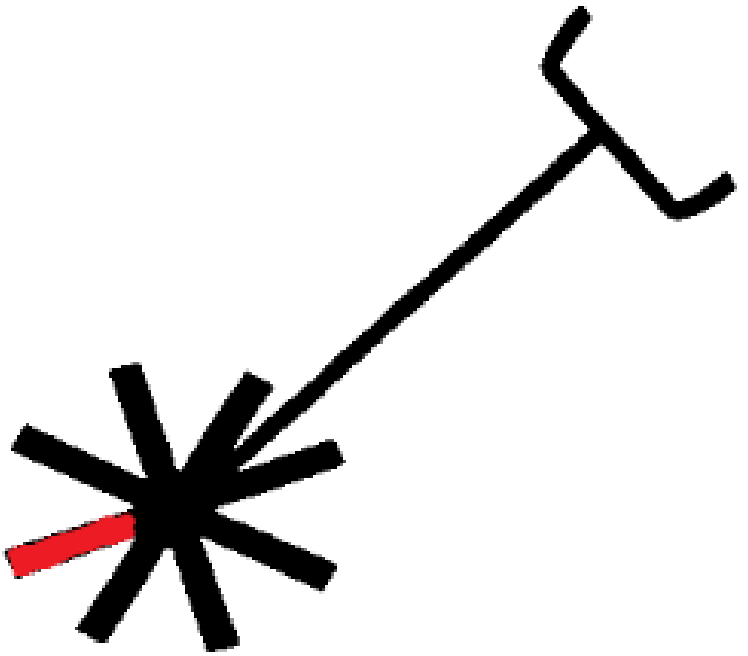
Methods



Grass species composition



Methods

GRASS PRODUCTION

Results

Brown Rhodes Grass

Results

Millet Grass

Results

Red Grass

Results

Finger Grass

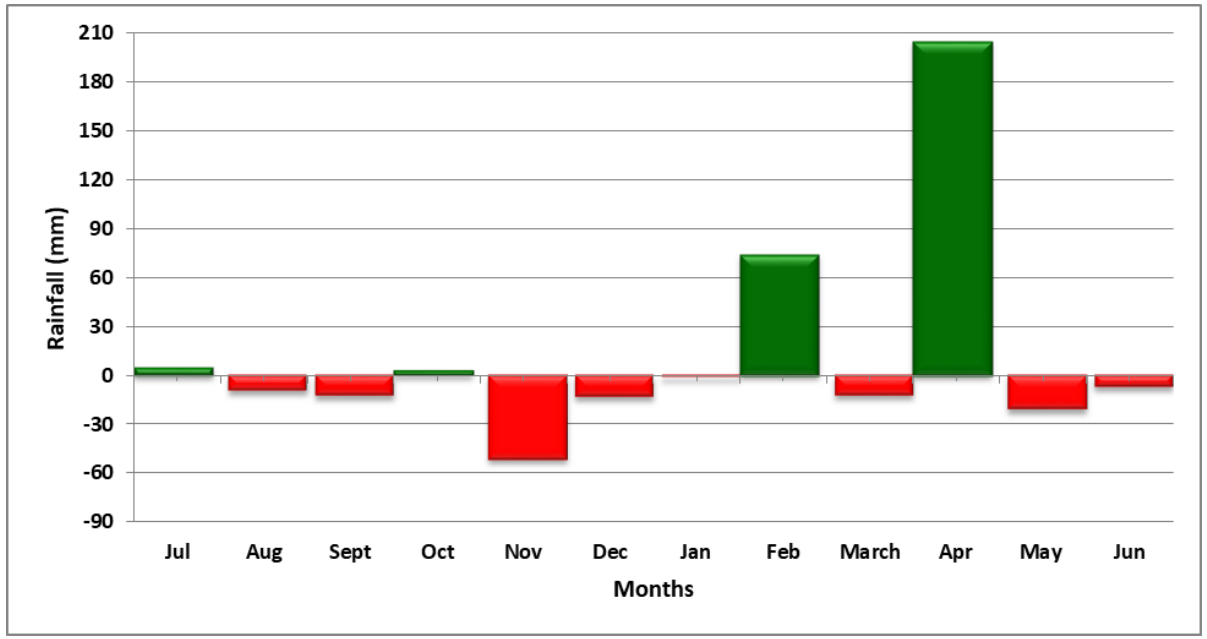
Results

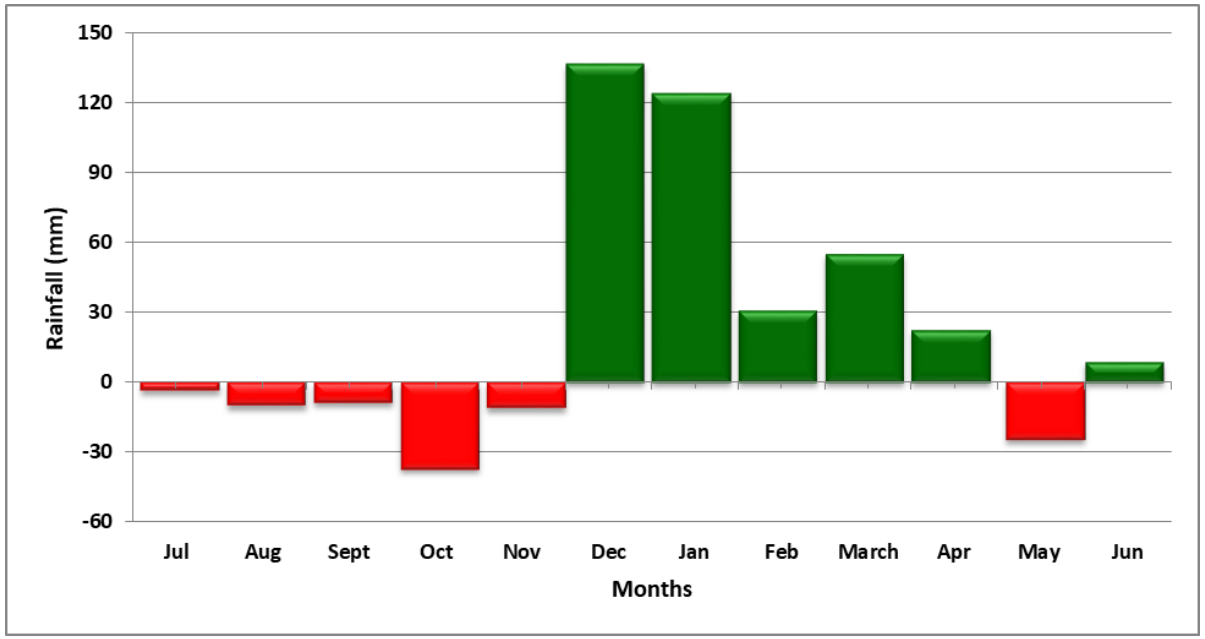
Sweet Signal Grass

Results

Three awned rolling Grass

Results





2018/2019

865.1mm

2019/2020

931.5mm

Results

Grass Species composition – Summer/Winter Camps

- No change
- Due to low animal numbers (5)
- Accidental fire

- **Grass Production – Summer/Winter Camps**
- Higher production in 2019/20 season
- Grazing capacity – better in 2019/20 due to higher rainfall

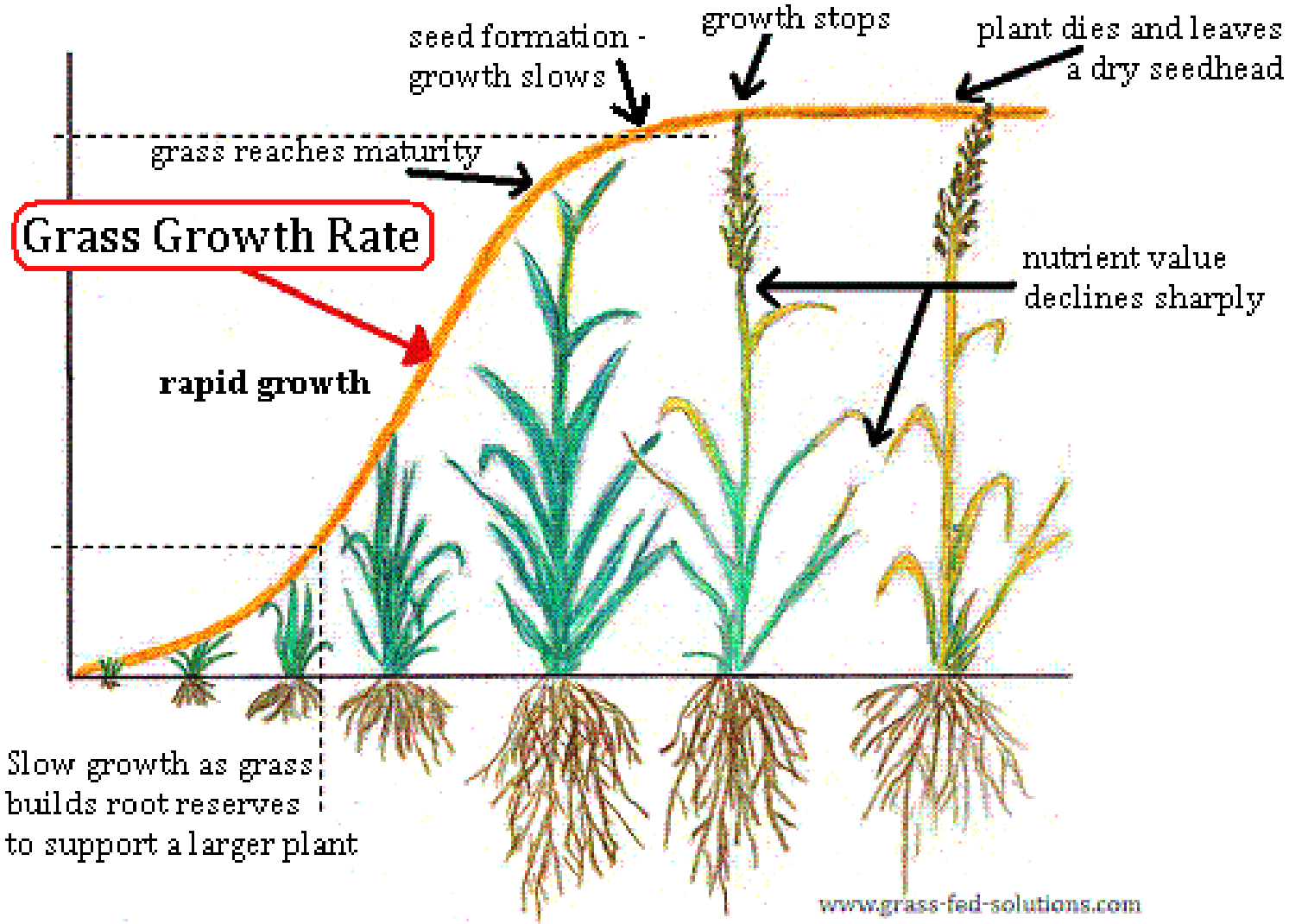
Results

Percentage Utilisation

	Utilisation Percentage (%)	
Summer Camps	Year 1	Year 2
Camp 3.8	19.9	26.9
Camp 3.3	14.6	21.6
Camp 3.5	14.3	28.8
Camp 3.1	23.9	25.0
Camp 9.14	14.4	21.2
Camp 11.1	33.6	41.0
Camp 11.2	16.0	40.8
Camp 11.3	25.0	39.5
Camp 11.7	21.9	50.5
Camp 3.10	**40.1**	**54.1**

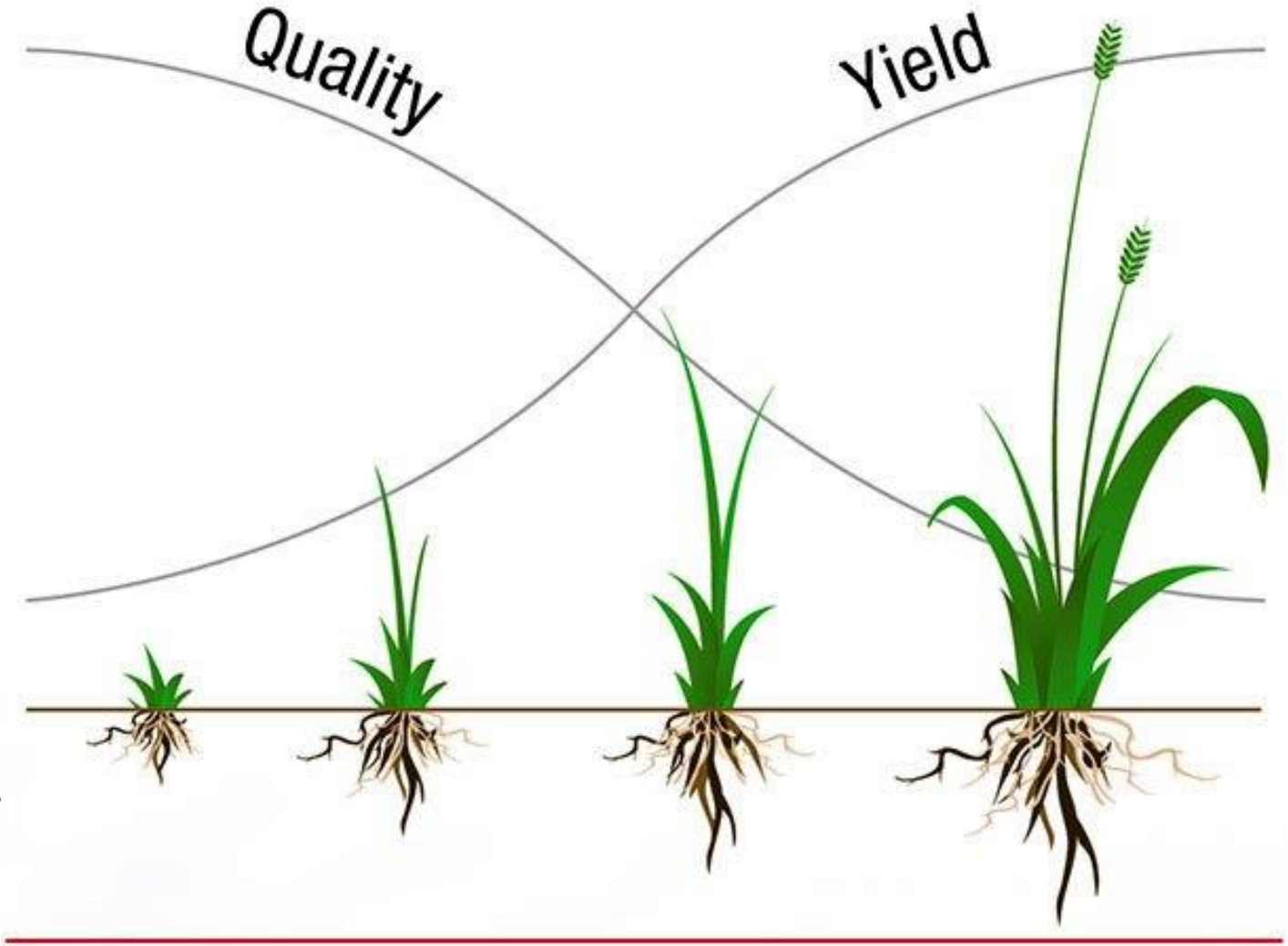
Results

Percentage Utilisation



Results

FIGURE 1 Interaction of forage quality and yield



Source: University of Minnesota Extension

Conclusion

- Very little change in the grass species composition too little animals
- Grazing system – no influence on the grass production – climatically driven
- % utilisation differs between years – growth patterns of grass

Conclusion

- All camps, except for Camps 3.10 and 3.12 are stable – can withstand short drought periods.
- Animal numbers too low to have an effect on the grass layer
- Any effect that was developing on the herbaceous layer due to the continuous grazing of the animals was unfortunately nullified because of the fire that occurred

RE A LEBOGA!