

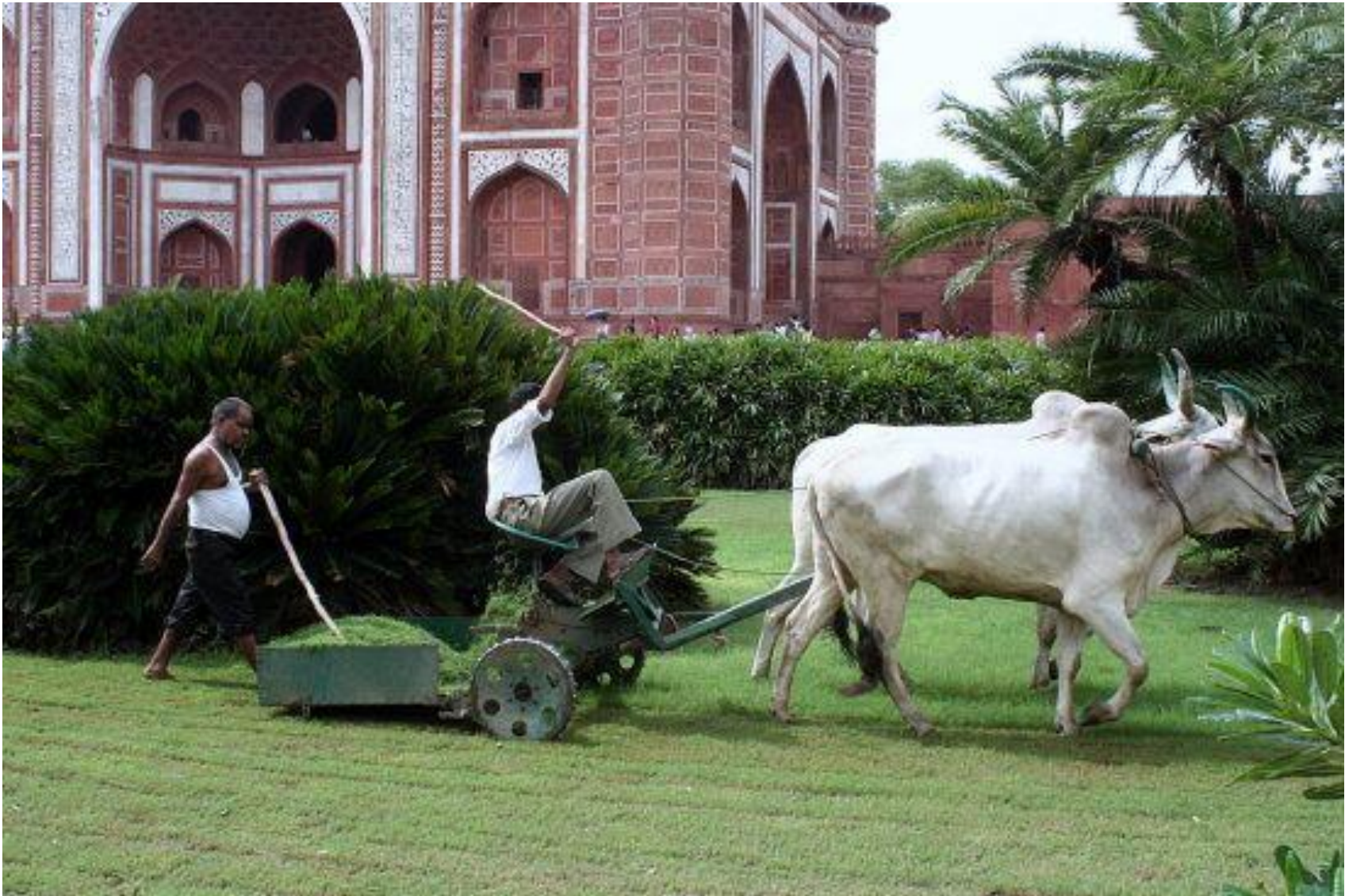
# PLANNING NUTRITION FROM PASTURES IN NORTHERN AUSTRALIA



**Question – What is the most important factor influencing nutrition with ruminants?**

**INTAKE**





# INTAKE

PASTURE YIELD

STAGE OF GROWTH

PALATABILITY / SPECIES  
COMPOSITION

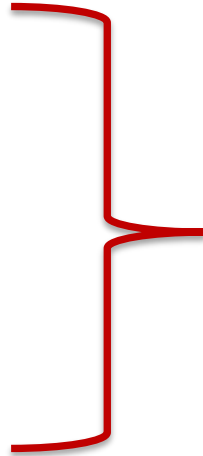
NUTRIENT BALANCE

STRESSORS  
(TICKS,WORMS,DISEASE)

AGE AND CLASS OF ANIMALS

LACTATION

WATER QUALITY



## DIGESTABILITY







A photograph of a herd of brown cows grazing in a lush green field. The cows are scattered across the field, with one cow in the foreground prominently shown eating grass. The background features a dense line of green trees under a bright sky. The text "HOW MUCH DO YOUR ANIMALS EAT??" is overlaid in large, red, 3D-style letters.

**HOW MUCH DO YOUR  
ANIMALS  
EAT??**



**450 KILOGRAM COW**

**DIGESTIBILITY**

**1.6-2.4%** OF HER BODYWEIGHT PER DAY

8 - 11 KILOGRAMS / DAY

3300 KG DRY MATTER / YEAR

LACTATION CAN INCREASE INTAKE BY **35%**

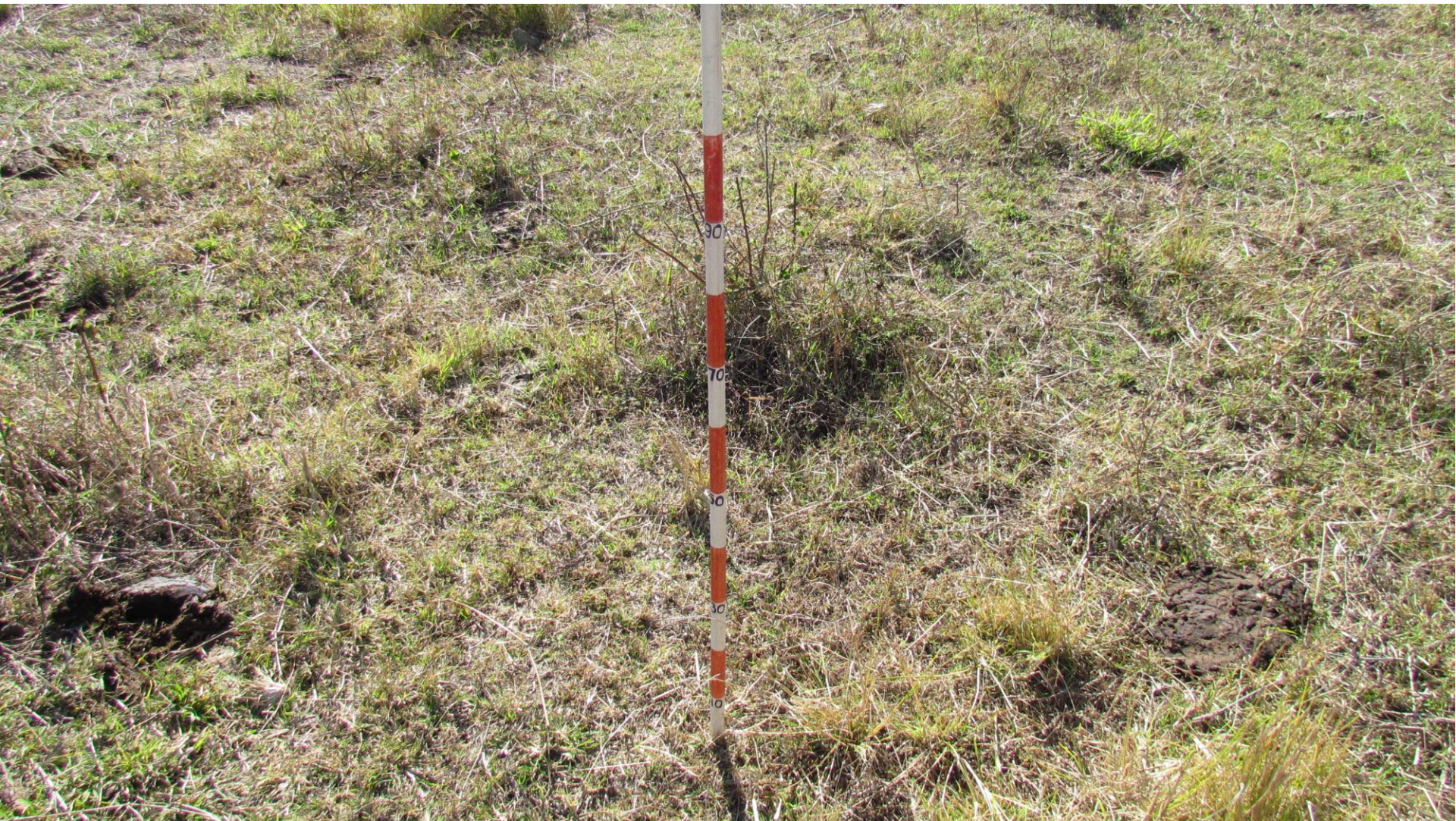
**3800 KG**

**DRY MATTER PER YEAR**

WHAT ARE THE  
NUTRITION  
ADVANTAGES OF  
MANAGING  
LAND CONDITION?



# LAND CONDITION C





# LAND CONDITION B





**How do these pastures compare nutritionally??**

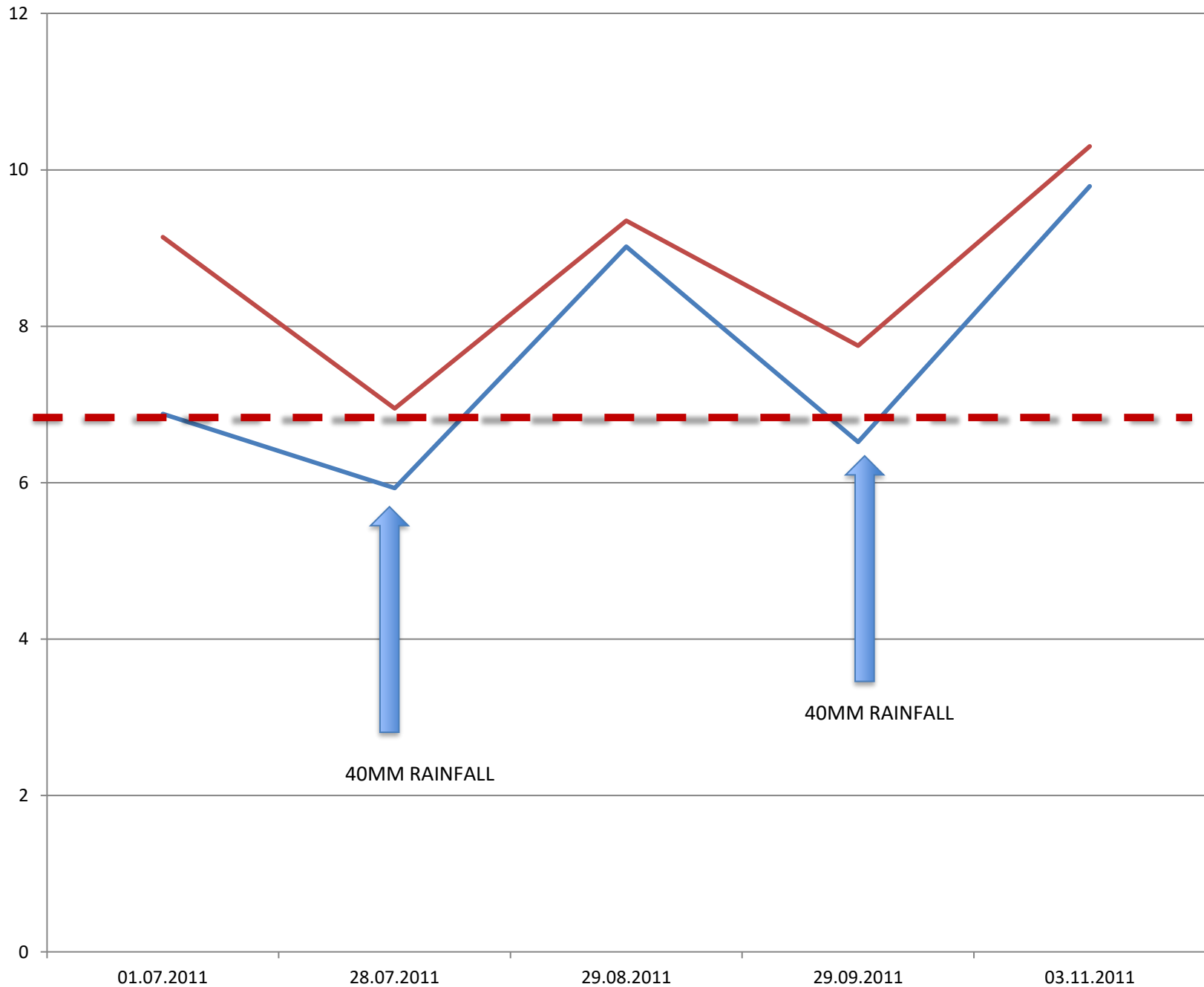
**Faecal NIRS**

**Forage Crude Protein**

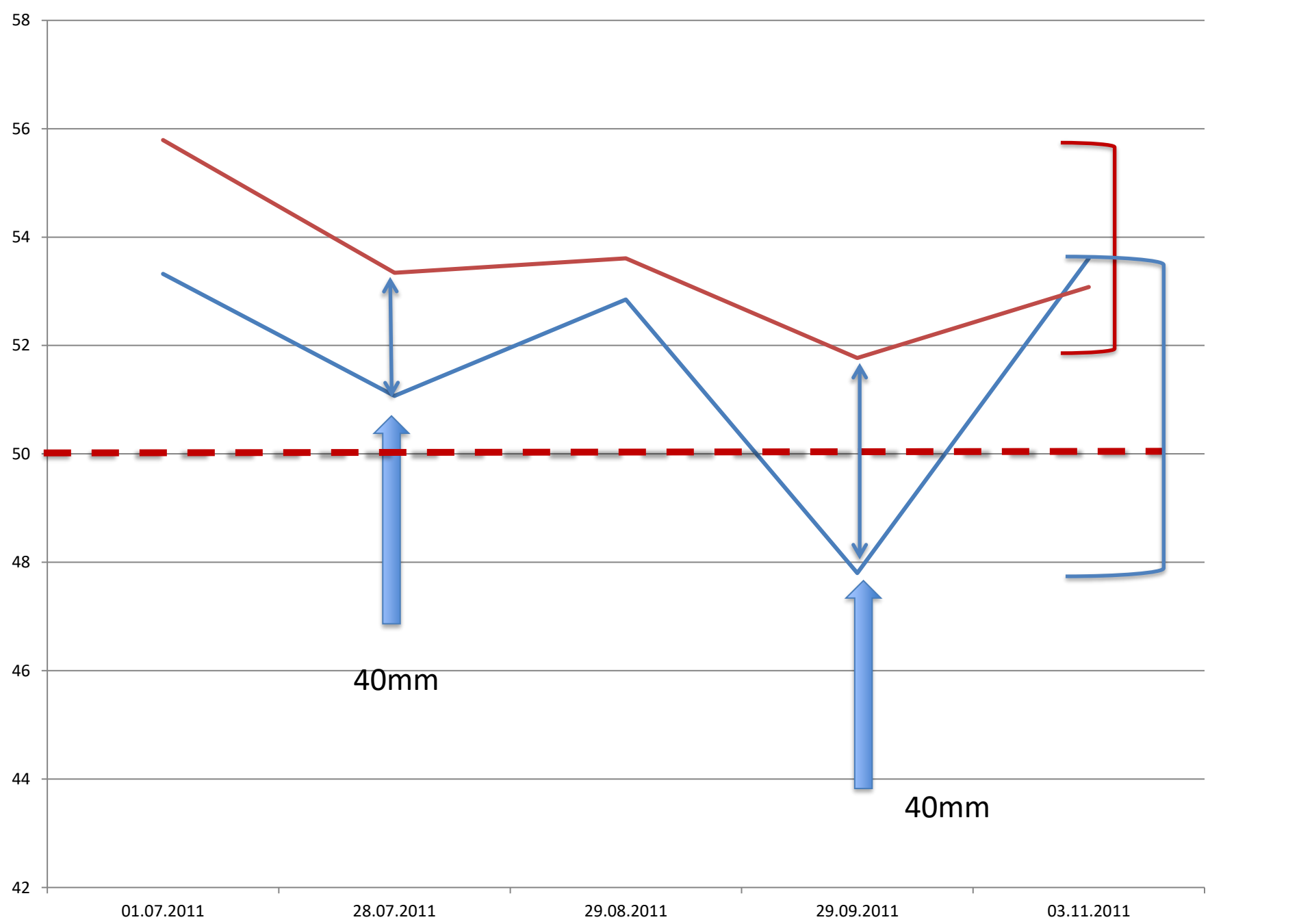
**Dry Matter Digestibility**

**5 month period**

**July-November**









WHAT DOES THIS MEAN FOR THE THOSE CATTLE GRAZING THE PADDOCKS?



	LAND CONDITION A	LAND CONDITION C
DMD (%)	52	48
ME/kg of grass	7.5	6.5
CP (%)	8	7
DM intake of 400kg cow (Dry/pregnant)	2.0% (8.0kg)	1.8 % (7.2kg)
Overall ME intake (MJ)	60 MJ	47 MJ
Overall CP intake (g)	640 g	504 g
Requirement of the cow (3rd trimester)	67 MJ 657 g	<b>DEFICIT =</b> <b>20MJ ENERGY</b> <b>140 G PROTEIN</b> <b>2.5 kilograms of</b> <b>M8U/head/day</b>
Weight loss in B condition paddock	0.1kg/head/day	
Weight loss in C condition paddock	0.4kg/head/day	

# IN SUMMARY

MAXIMISING RUMINANT FUNCTION AND EFFICIENCY (INTAKE) IS VERY IMPORTANT TO MANAGING BEEF CATTLE.

THERE ARE A NUMBER OF FACTORS THAT INFLUENCE THIS BUT THE KEY IS THROUGH MANAGEMENT OF PASTURES.

SMALL INCREASES IN PASTURE YIELD, QUALITY AND DIVERSITY CAN HAVE LARGE IMPACTS ON RUMIANT PERFORMANCE.

CAN WE PROVE TO OURSELVES THAT WE ARE DOING A GOOD JOB ON THESE?

PLANNING IS THE KEY.