

# Pasturebase Ireland

## Lessons for Spring grazing management

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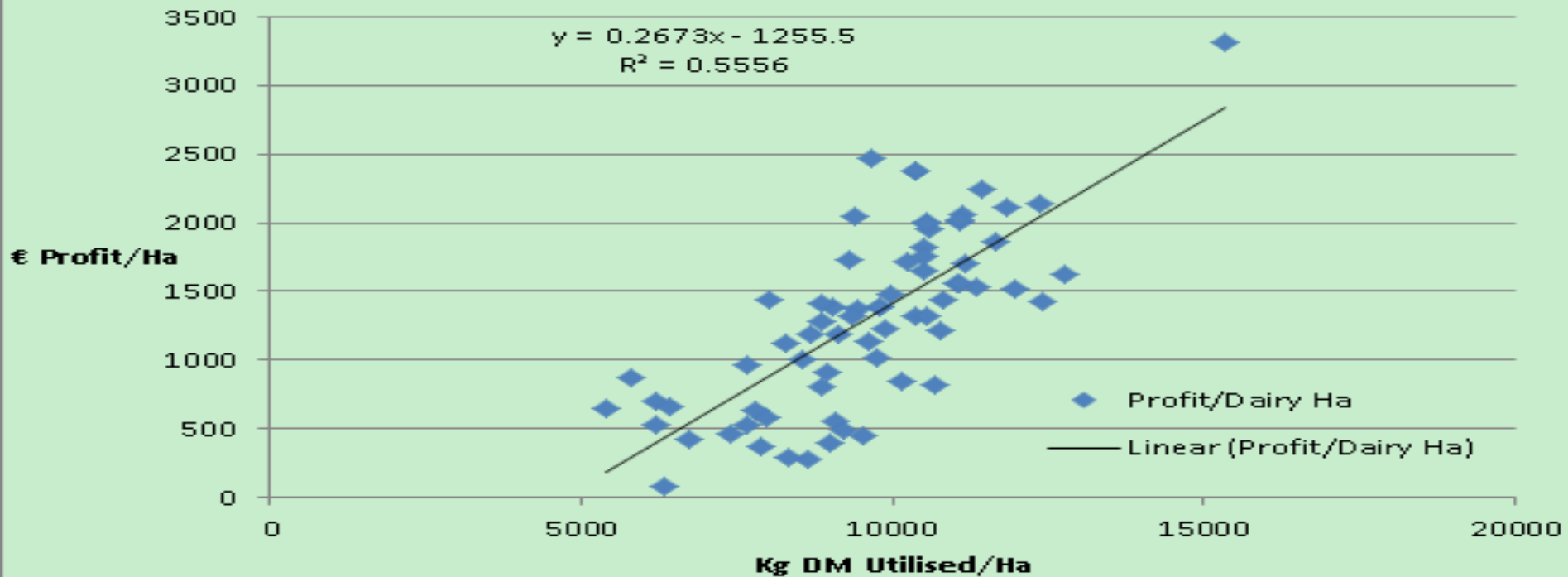
<http://www.agresearch.teagasc.ie/moorepark>  
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# Talk Outline

- **Pasturebase Ireland results**
- **Factors affecting spring grass supply**
- **Grazing management principles and impacts**
- **Spring Nitrogen & spring grass milk production value**

# Grassland Challenge – Improve Production and utilisation

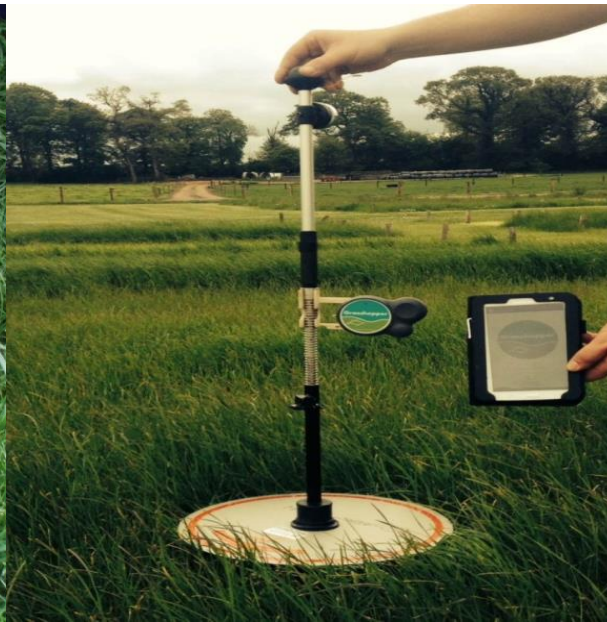
## Profit/Dairy Ha - Kg DM Utilised/Ha

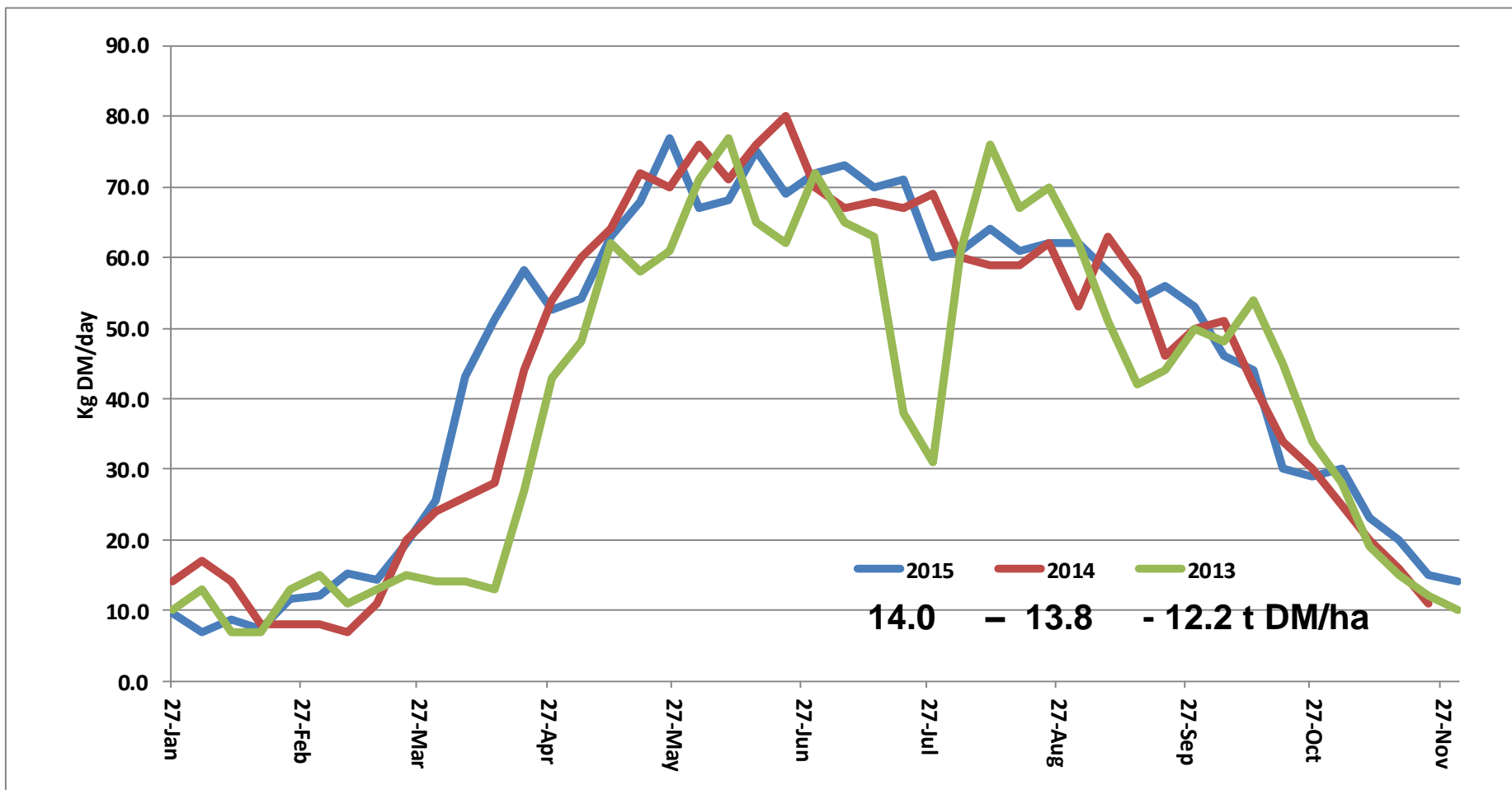


- 1t/ha increase in grass utilisation is worth €10,000-12,000 to a 40ha farm

# PastureBase Ireland

- **Web based grassland management decision support tool**
  - **Front end**
- **Grassland data base – back end**
- **Data capture by farmer**
- **Core measurement is pre-grazing herbage mass / farm**



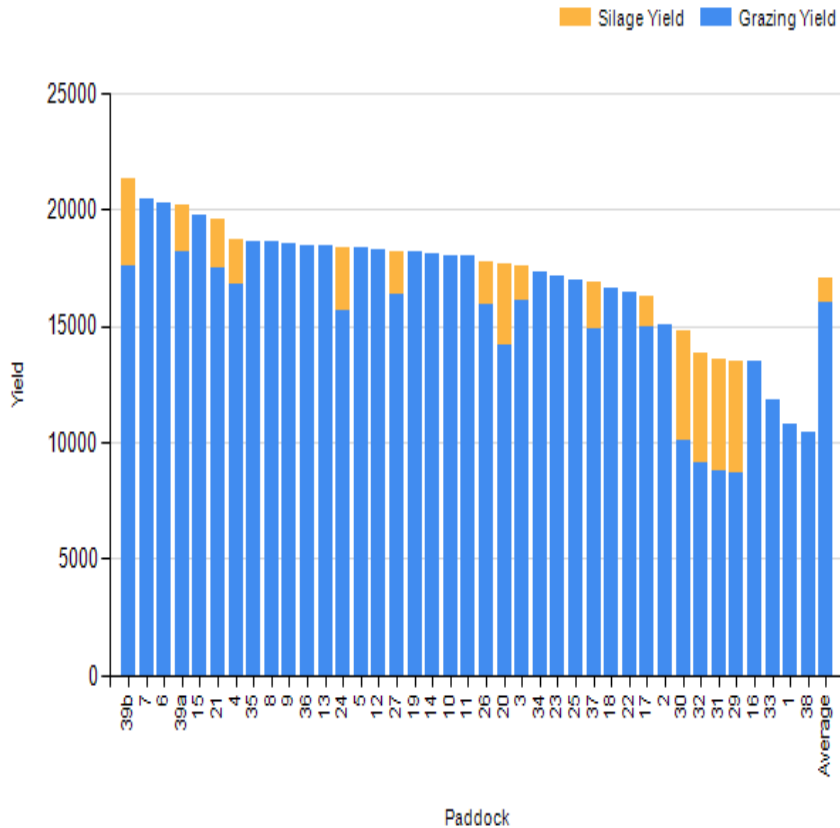


# Pasture Base Ireland Dairy Farms DM Production

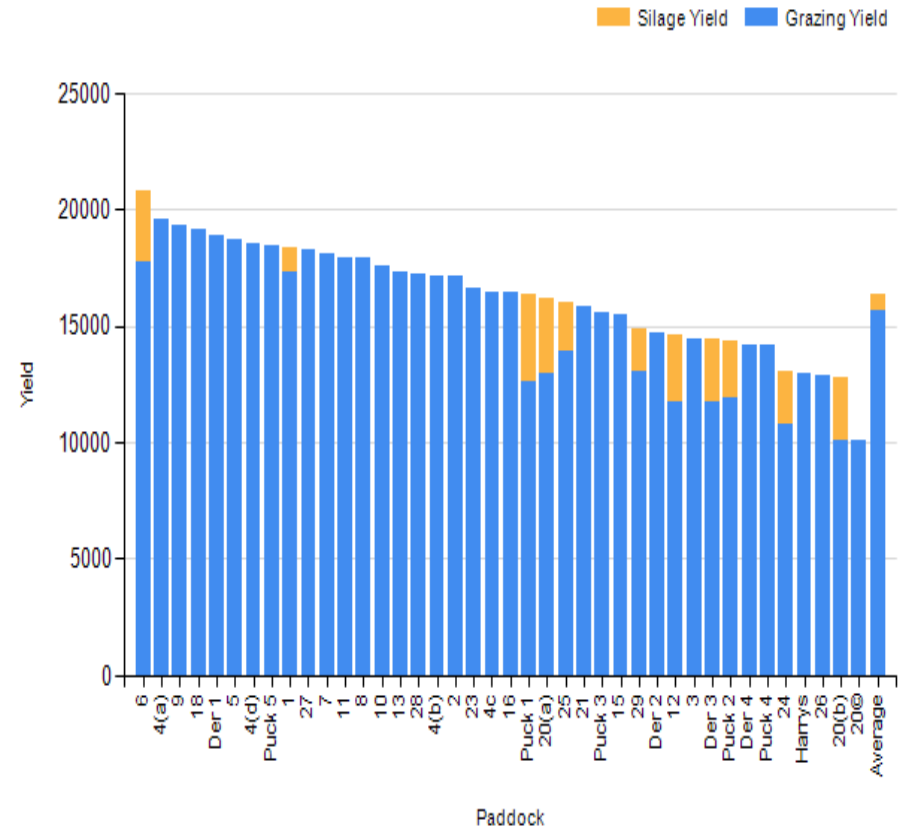


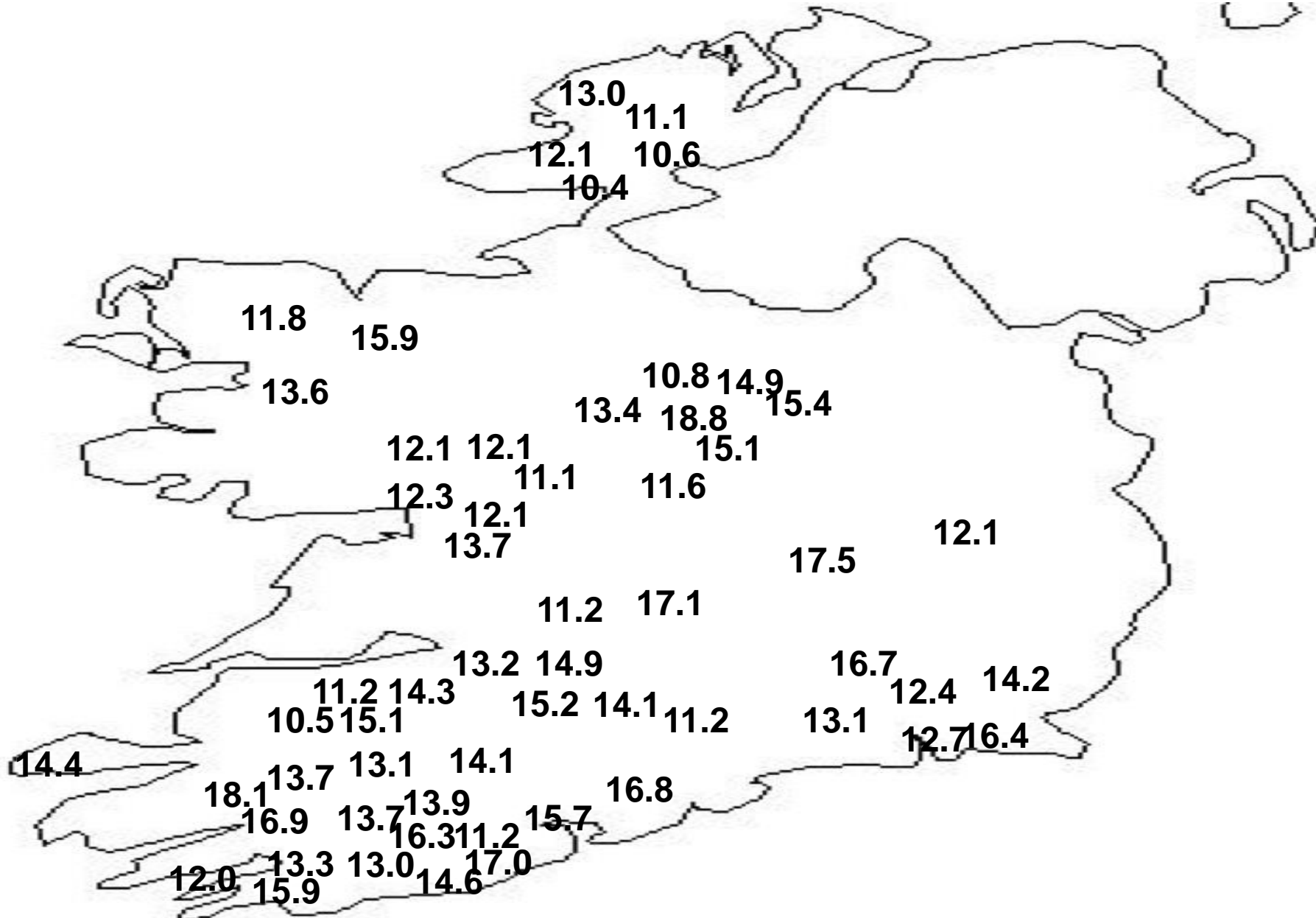
# What are high producing farms doing ?

Cumulative Paddock Yield to 01/12/2014



Cumulative Paddock Yield to 01/12/2014

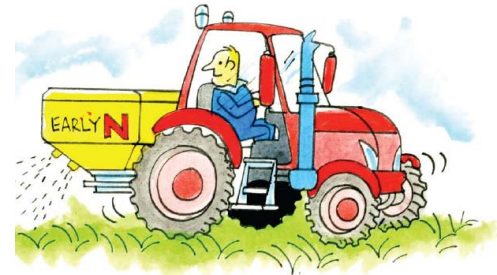




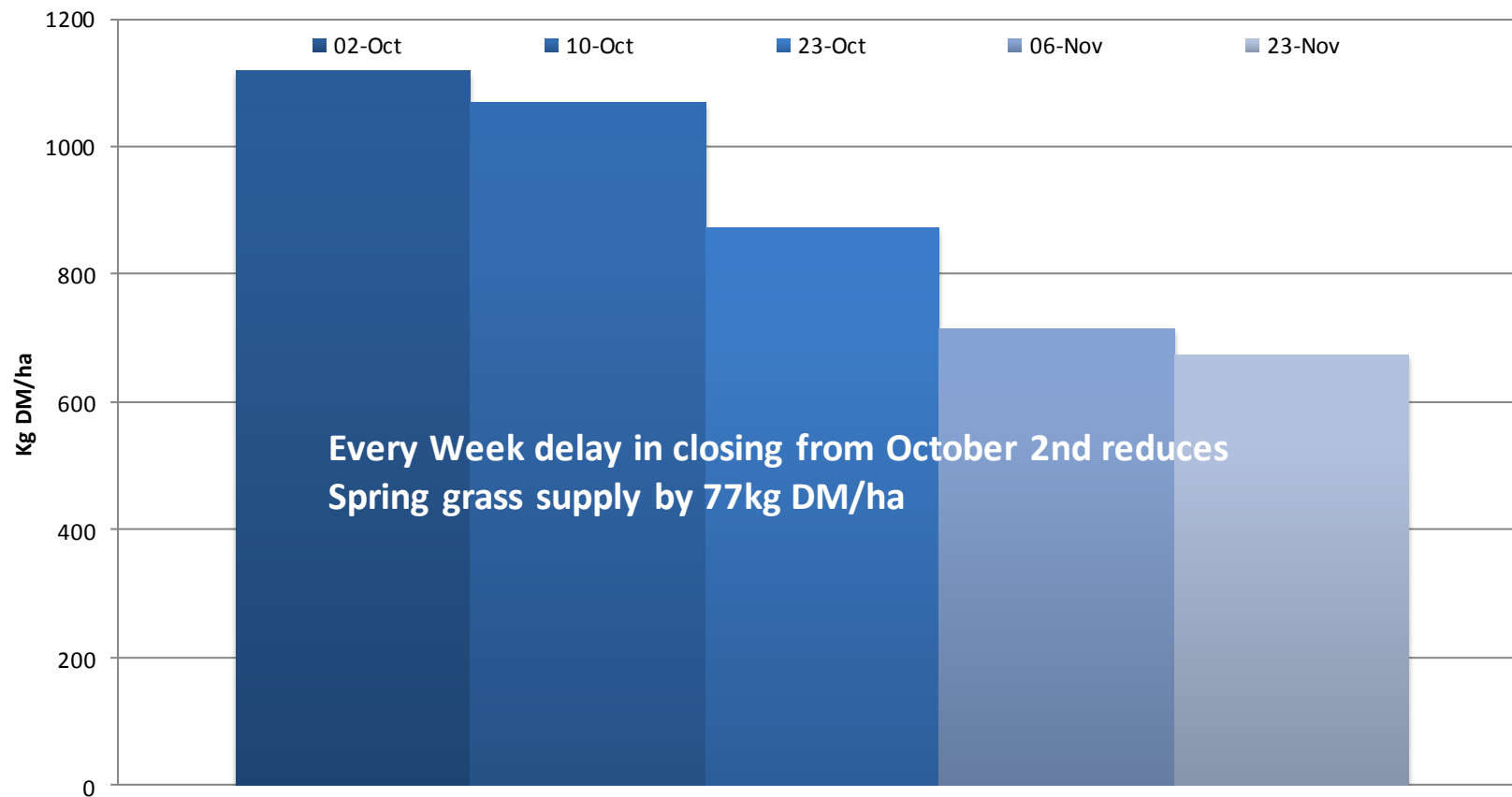


# Factors Influencing Spring Grass supply

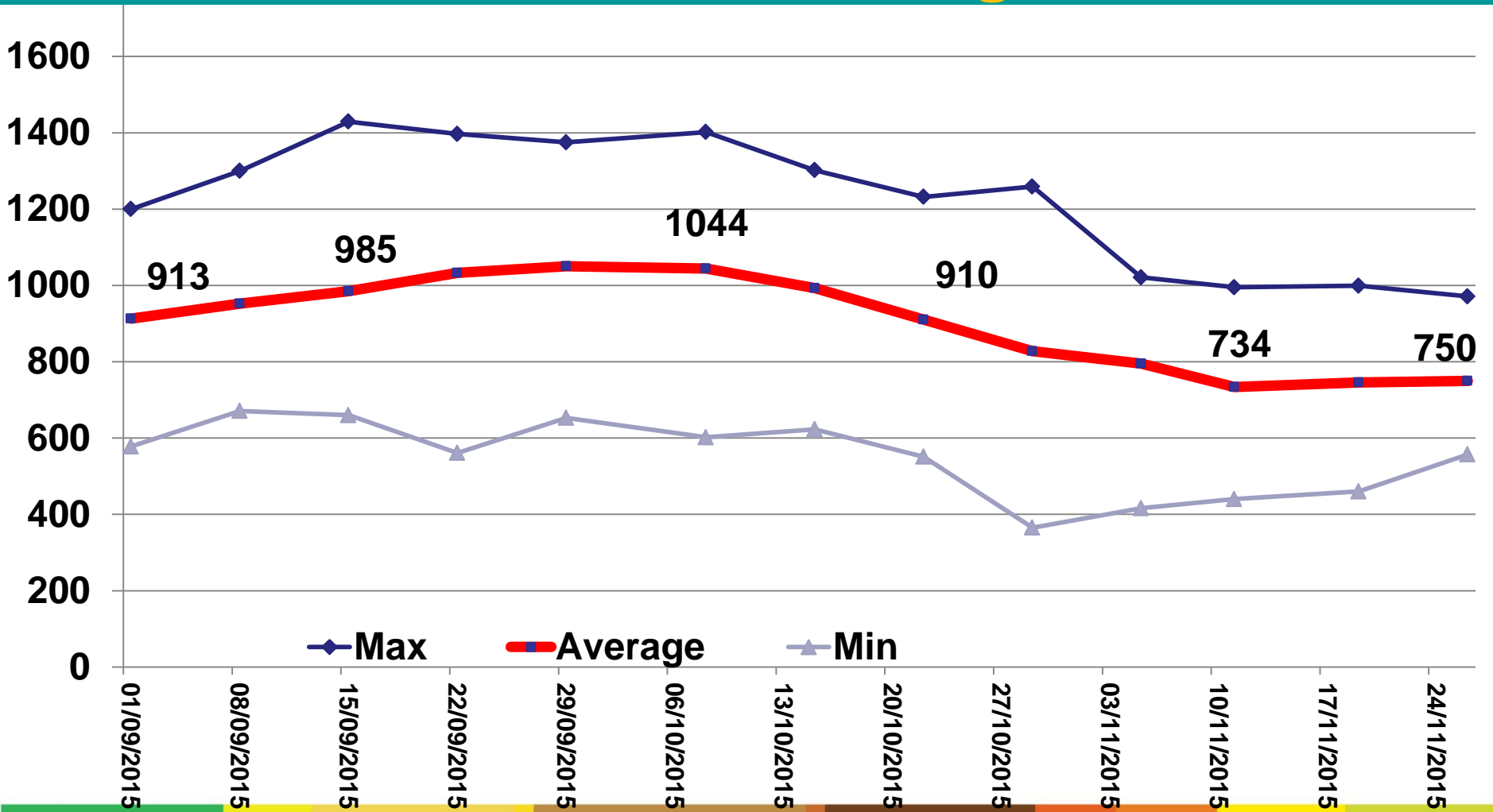
- Autumn closing date - **farmer**
- Closing cover - **farmer**
- Winter grass growth rate - **50% farmer**
- Spring nitrogen application- **farmer**
- Spring grazing management – **farmer**
- Spring grass growth - **50% farmer**



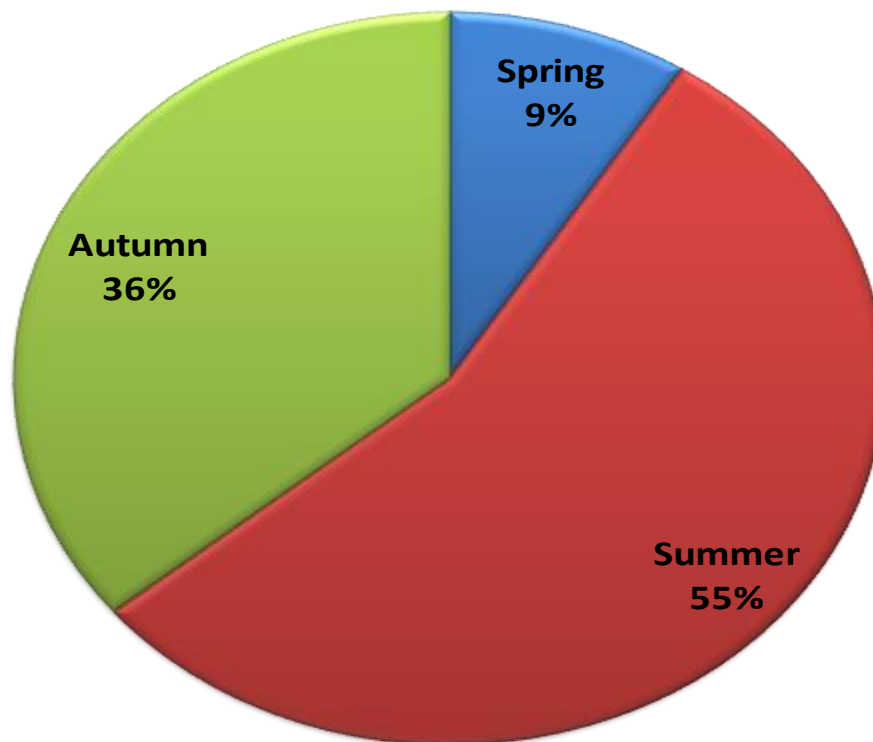
# Spring Pasture Accumulation as influenced by previous Autumn closing date



# Farm cover (kg/DM/ha) profile from Autumn 2015 to Closing

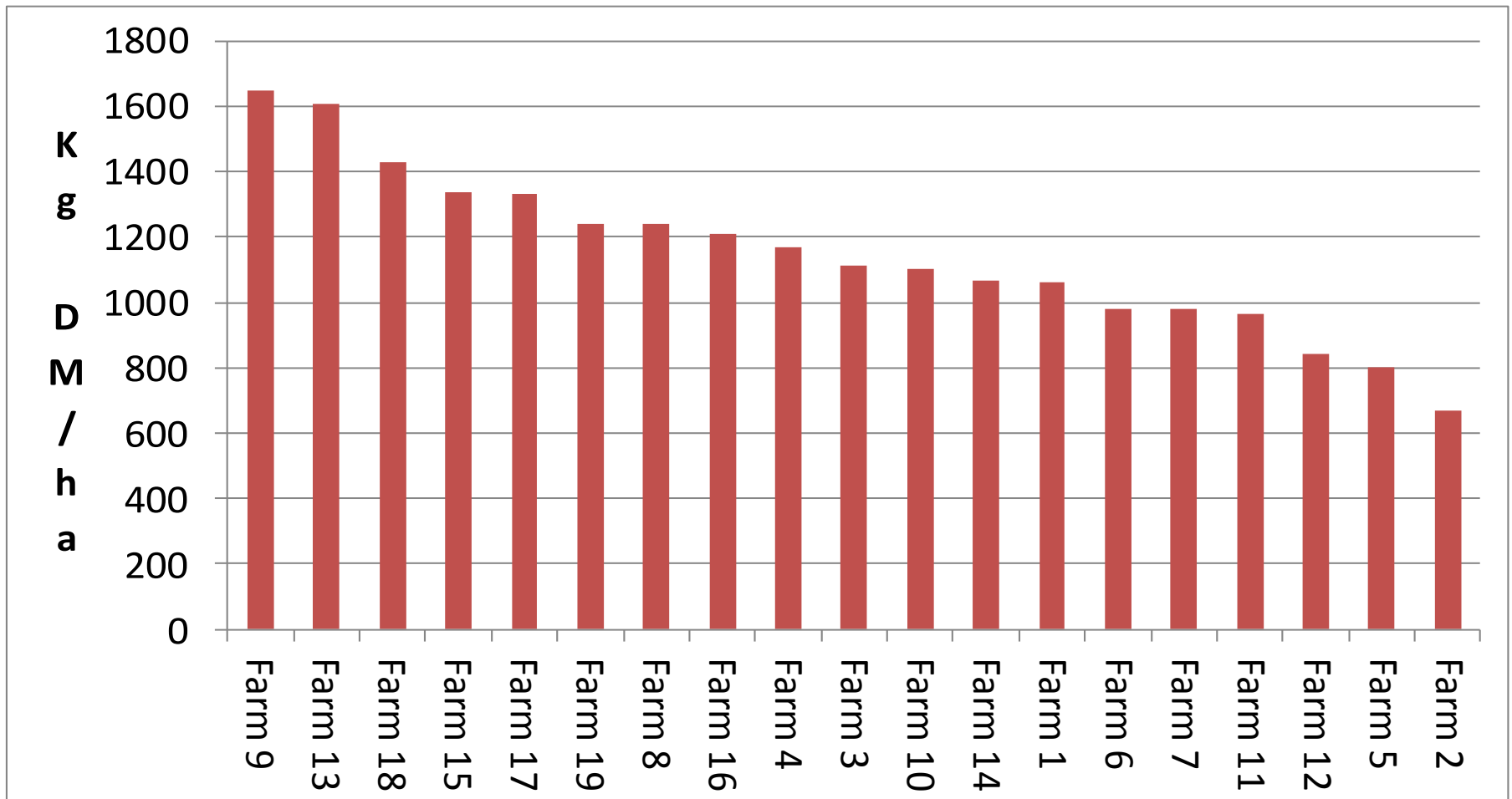


# DM Production Proportion by Season



**Spring growth Variation is 5% to 14% - 0.5t DM/ha to 1.8t DM/ha**

# Spring Grass Production on Farms 2015



# Spring Grazing Management - March 2015

- ✓ 75% of cows calved
- ✓ Farm cover >800kg DM/ha
- ✓ Area grazed March 2 (21%) (8 - 46%) (>30%)
- ✓ Cows allocated 10kg DM – 3kg concentrates
- ✓ Nitrogen 30 units spread (0 - 60 units/ac) (60)
- ✓ Slurry 22% of area (0 - 60%) (50%)

# Delaying Grazing in Spring - Digestibility effects

(Garry et al. 2015)

	Period 1 (Early; 25 <sup>th</sup> Feb- 9 <sup>th</sup> Mar)			Period 2 (Late; 19 <sup>th</sup> Mar – 30 <sup>th</sup> Mar)		
Treatment	Early	Mid	Late	Early	Mid	Late
Closing date	1 <sup>st</sup> Oct	15 <sup>th</sup> Oct	1 <sup>st</sup> Nov	1 <sup>st</sup> Oct	15 <sup>th</sup> Oct	1 <sup>st</sup> Nov
Days closed	156	142	125	177	163	146
Pre Yield (kg DM/ha)	2364	1647	1070	2977	2263	831
<b>DMD (g/kg)</b>	<b>800.1</b>	<b>801.6</b>	<b>804.7</b>	<b>768.6</b>	<b>813.5</b>	<b>795.6</b>

- **Early closed paddocks need to be grazed by mid March**

# Early Grazing Effects on Sward Characteristics

**Early grazed sward**



**+ Milk solids**  
**+ Grass Growth**  
**+ Grass Quality**

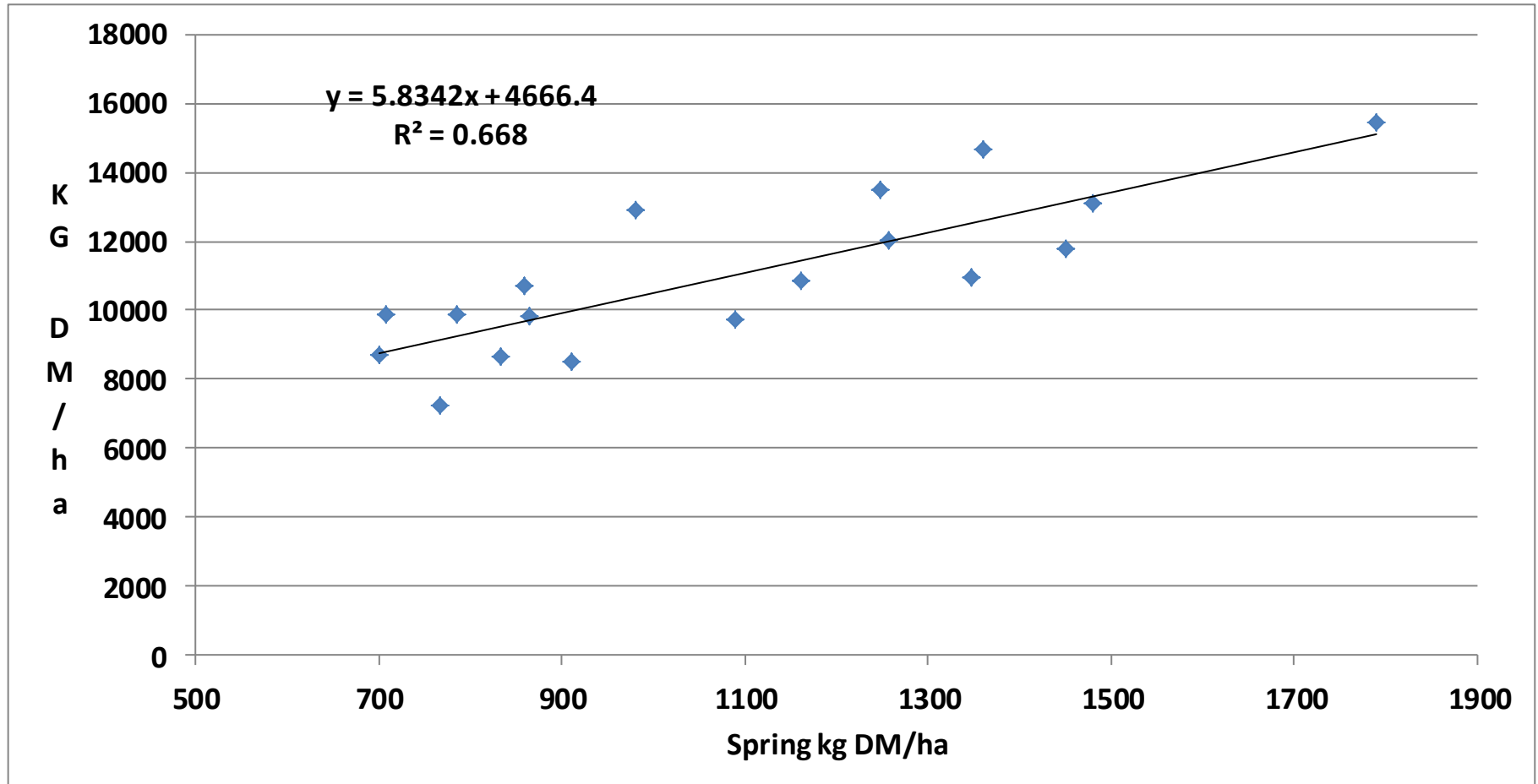
**Late grazed sward**



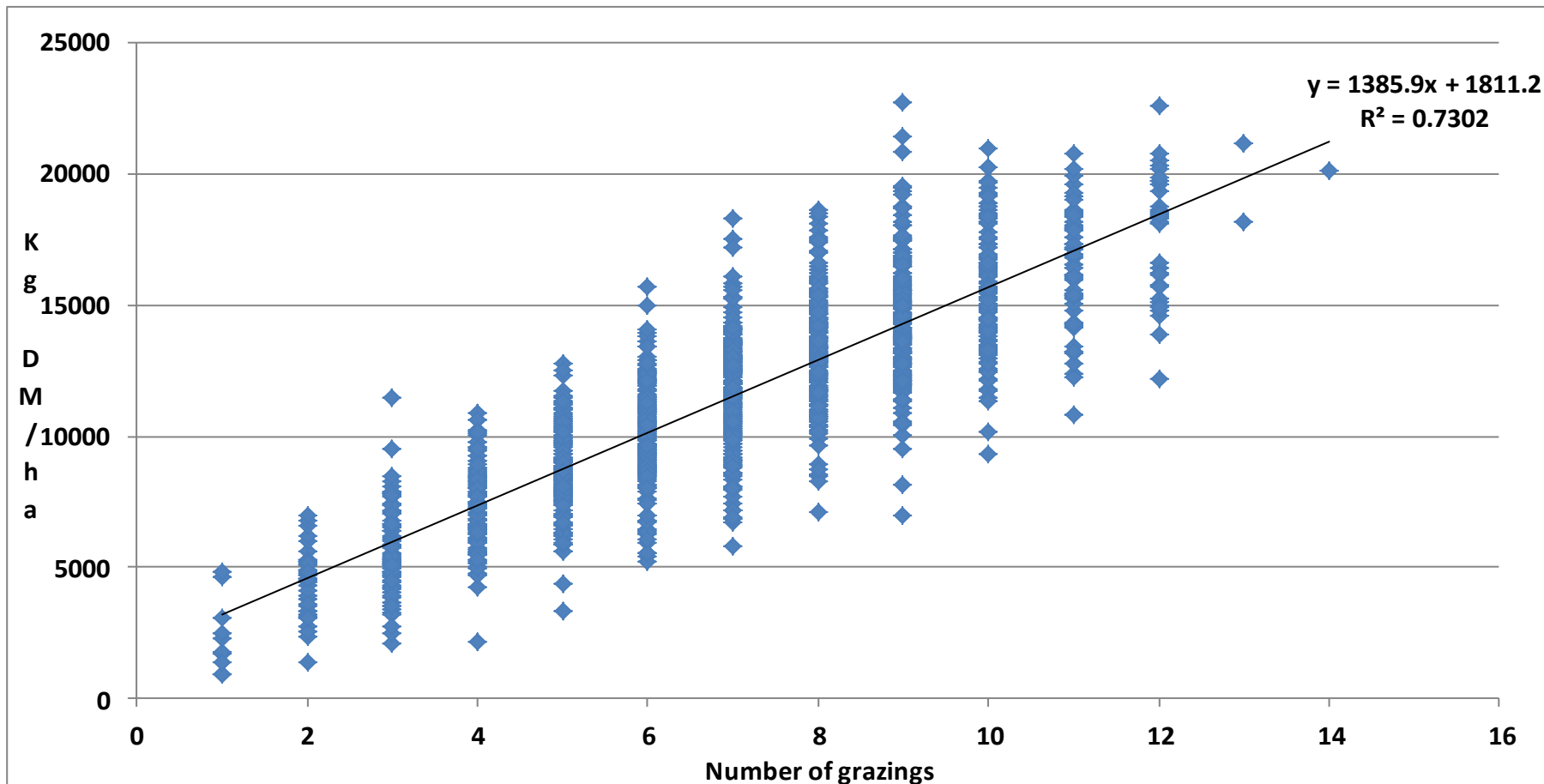
**- Low utilisation**



# Spring production and its association with total grazing DM production



# Number of grazings achieved and its association with total grazing DM production



# Fertiliser Recommendations – February/March

- Spring Nitrogen (N) application is essential to boost growth on all paddocks

**Average Grass Growth Response of 10 kg DM per 1 kg N applied per ha in Spring**

**Efficiency of slurry utilisation increased (x6) during February & March**

- Immediately after the closed period for fertilizer and slurry application
  - Apply 2,500 gals. slurry/ac. to 30% of paddocks (<650 kg DM/ha herbage mass)
  - Apply 23 units urea/ ac. to remainder (Urea= 30% cheaper than alternatives/kg N)
- In early March
  - Apply 2,500 gals. slurry/ac. to 30% of paddocks
  - Apply 40 units urea/ ac. to remainder
- 70-80 units N applied by April 1<sup>st</sup>
- Weather forecasts to avoid heavy rain and waterlogged soils within 48 hours of nutrient application to minimise losses and maximise benefits.

# Spring Grass - Milk Production Effects

(Kennedy et al. 2004)



	Indoors	Outdoors
<b>Milk yield (kg)</b>	<b>27.3</b>	<b>28.3</b>
<b>Milk fat conc. (%)</b>	<b>4.16</b>	<b>3.86</b>
<b>Milk protein conc. (%)</b>	<b>3.07</b>	<b>3.36</b>
<b>Milk fat yield (g/day)</b>	<b>1124</b>	<b>1094</b>
<b>Milk protein yield (g/day)</b>	<b>832</b>	<b>949</b>
<b>Milk solids yield (kg/day)</b>	<b>1.97</b>	<b>2.04</b>

# Take home messages

- ✓ **Potential exists to grow more grass - improvements in grazing management**
- ✓ **Framework – 2016 – is different**
- ✓ **High spring covers – spring rotation targets**
- ✓ **Set farms up for the year – third grazing early May**
- ✓ **Wet weather management plan – on/off grazing, multiple access points, flexible attitude**
- ✓ **Spring grass is a crucial feed for the lactating cow**

# Let 2016 be the Year to use grass better

## Questions ?