

# Farm for the Future



23<sup>rd</sup> February 2022

Ed Pollard, Youlden Farm, North Bovey, TQ13 8RD

## Grassland Management

Luppo Diepenbroek

Straight Line Nutrition Ltd



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# Why Manage Grassland?

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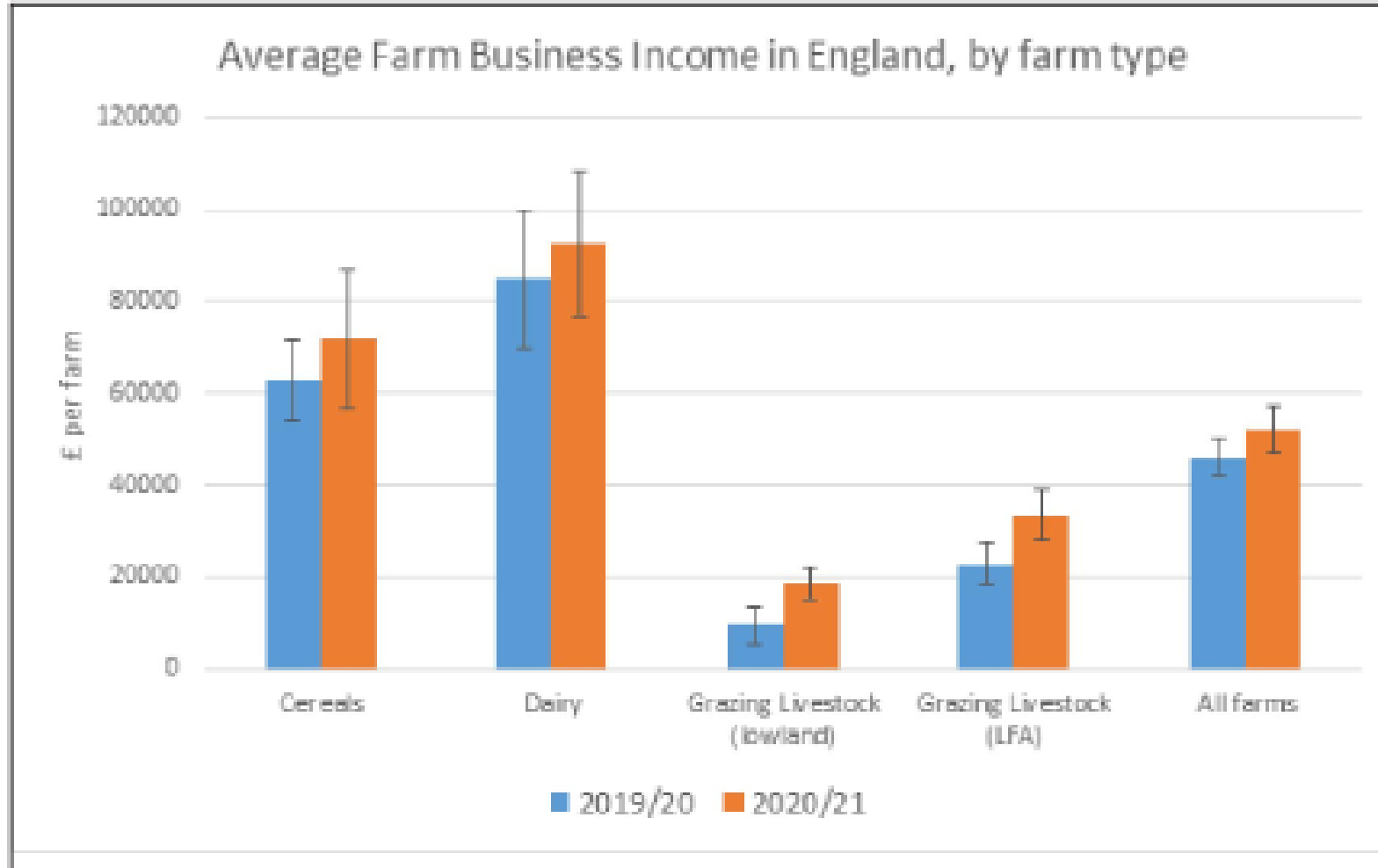
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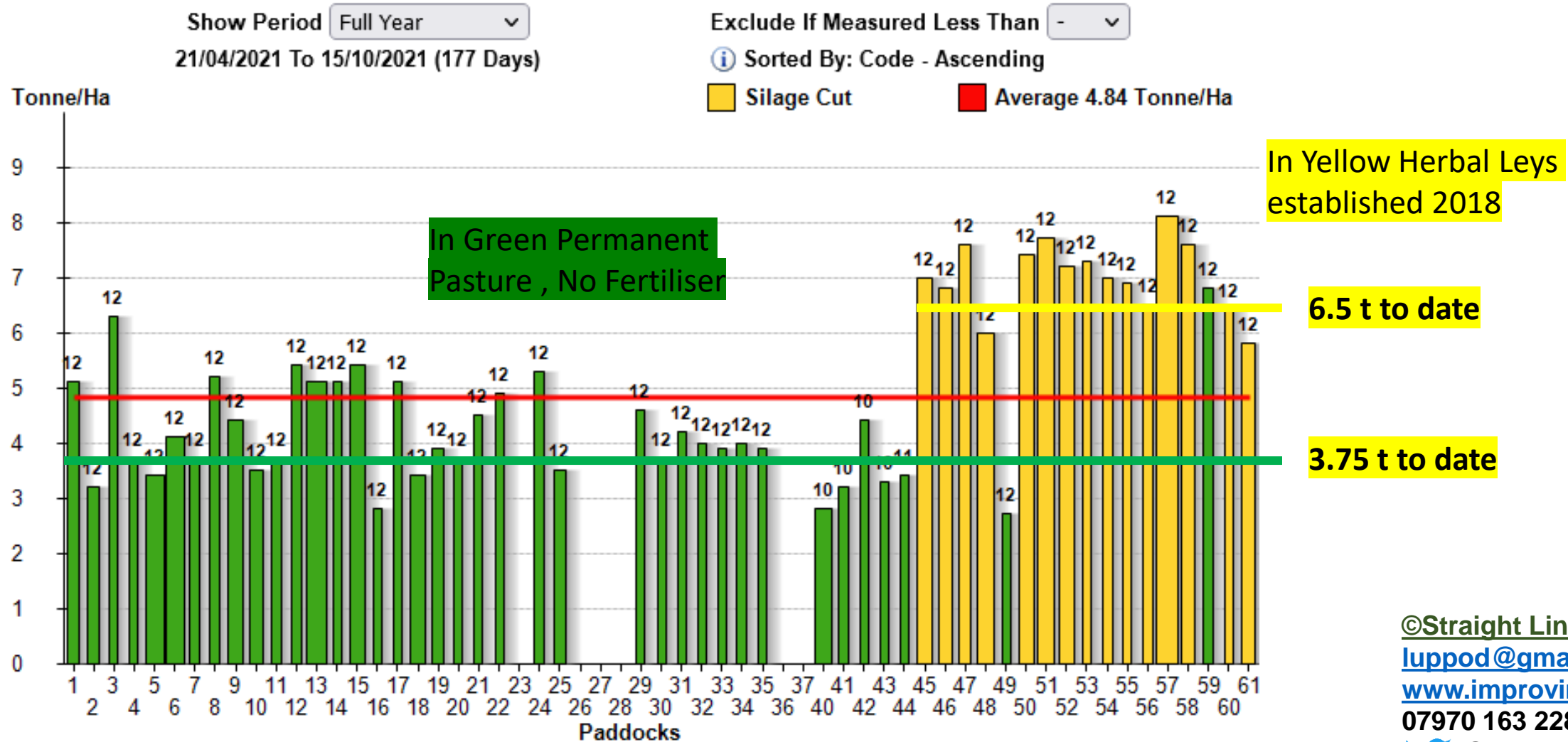
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# To Improve Profits!



# Actual Measured Grass PP VS Herbal Leys production

Source Johnny Haines, West Sherford AHDB Beef and lamb Strategic Farm 2017-2021



# Forage Quality: silage analysis

Ed and Geoff Pollard:

FWAG SW Herbal Trial: Silage Cut 5<sup>th</sup> May 2018:

ME 10.2 MJ/kg DM

Protein 12.7%

Intake Factor 107.8 g/kgMLW


Sample:	Multispecies Ley	Ryegrass Analysis
	23/11/18	
Dry Matter, DM (%)	30.6	31.7
NCGD (Digestibility) D value (%)	79.4	74
Ruminant ME (DM Basis) (MJ/kg)	12.7	11.9
Crude Protein, CP (%)	20.5	14.7
Neutral Dig. Fibre, NDF (%)	42.5	37.2
Ash (%)	8.8	9.1

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# What does Research Tell Us?

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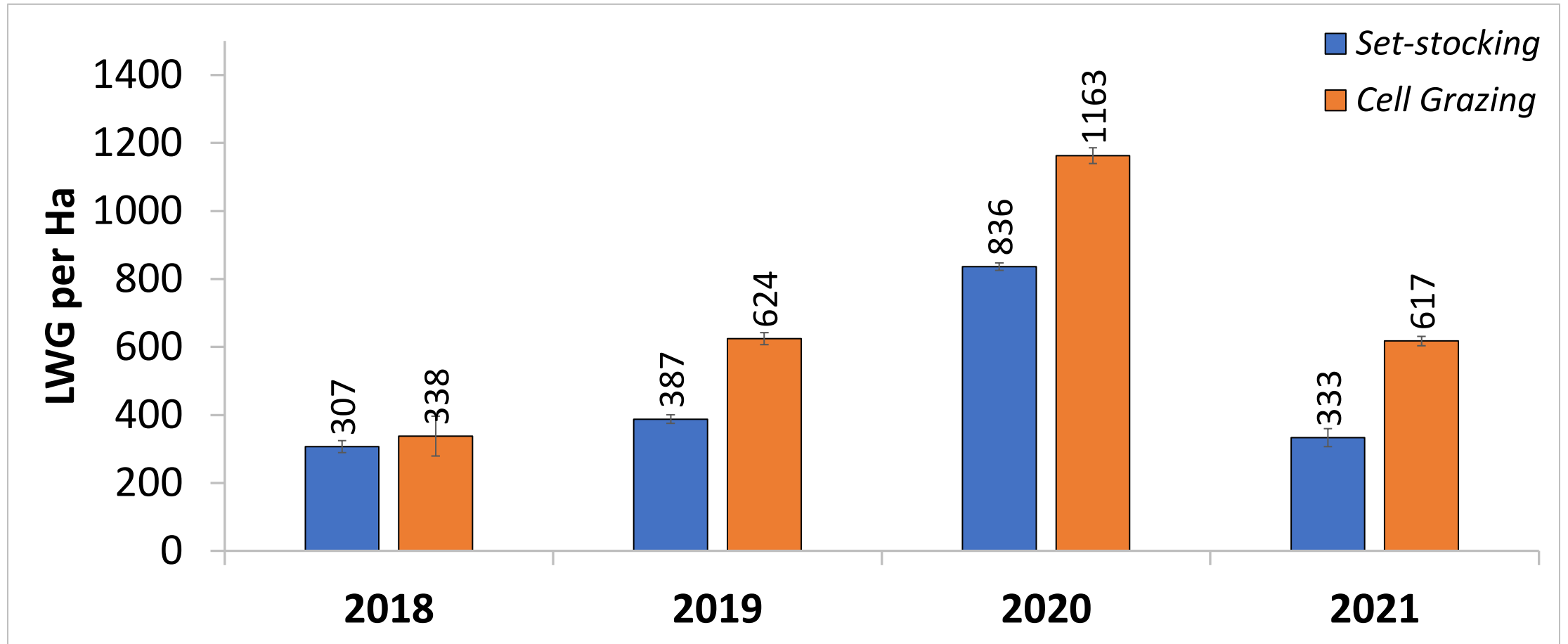
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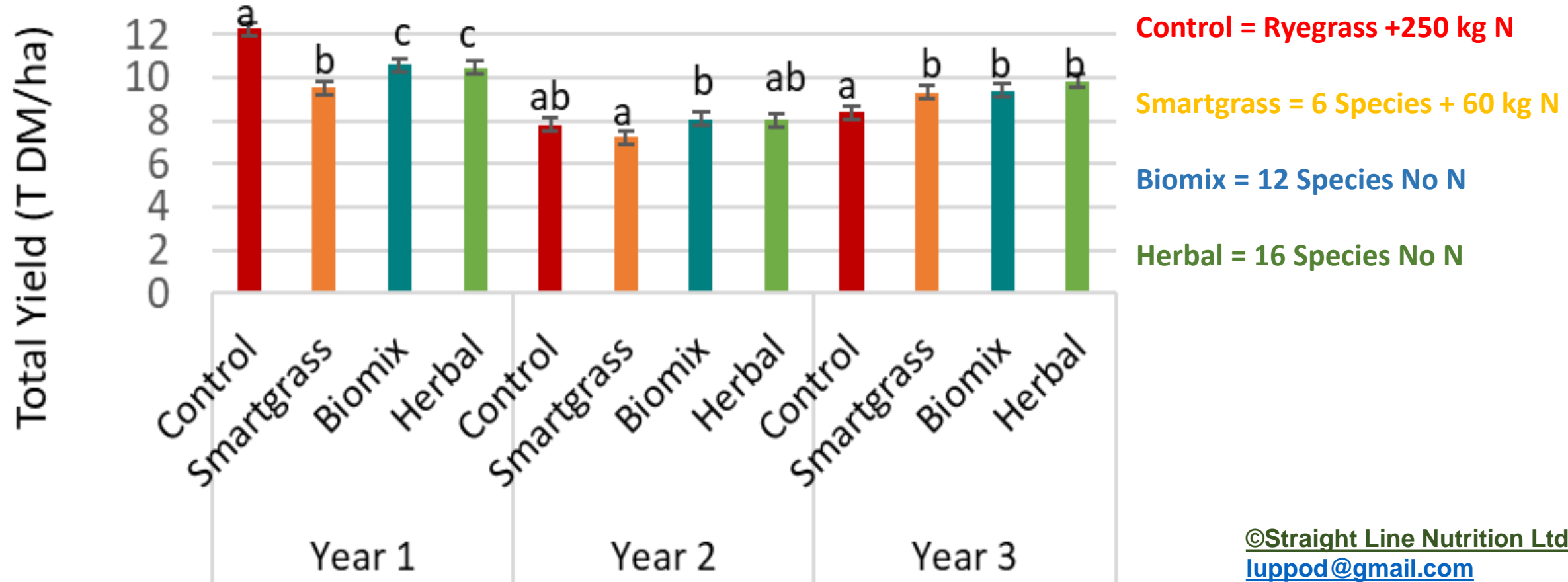
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# Productivity per hectare



# 3 Year Research Project on Herbal Ley:

Duchy College, North Wyke and Reading University





# Herbal Ley Selection:

- Mid Tier: Pays £354/ha on GS4 and £115/ha for OP4 (Organic for 5 years)
- 5 Grasses:
  - Perennial Ryegrass, Late Heading Hybrid for grazing
  - Meadow Fesque
  - Tall Fesque
  - Festuloliums (Aber Root)
  - Timothy
    - (Cocksfoot)
    - (Smooth Stalked Meadow Grass)
- 3 Clovers:
  - Red Clover (at least 2 varieties (Aber Claret)
  - Alsike Clover
  - Birds foot Trefoil
  - Little (1/2) kg White Clover blend)
    - (Lucerne)
    - (Sainfoin)
- 5 Herbs:
  - Plantain
  - Chicory
  - Cows Parsley
  - Salad Burnett
  - Yarrow
    - (Common Knapweed)
    - (Oxy Daisy)



# Professional Experience

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# FW Finalist Grassland Manager 2019:

Dan Burdett

**Cockhaise Farm, Haywards Heath, West Sussex**

It takes courage to challenge convention, but Dan Burdett is doing just that by pioneering multi-species leys and grazing techniques on his organic dairy farm.

The low-cost, autumn calving unit has been under organic stewardship for 20 years, but productivity began to decline about five years ago, encouraging Dan to look for solutions.

His tonic to low grass output has been to use herbal leys comprising birdsfoot trefoil, alsike, chicory, plantain, cocksfoot and Timothy, alongside ~~high sugar~~ grasses to restore soil health. The deeper-rooting varieties are also having the added benefit of maintaining growth when the farm burns off in the summer.

The result is a spectacular sight of biodiversity, with plants attracting an array of wildlife. Soil health has also reaped the rewards, and productivity has more than doubled from 5t/DM/ha grown in 2014, to 12.6t/DM/ha grown last year.



# Devon and Cornwall Beef & Lamb Monitor Farm launch event

*Past Event - booking closed*

Tue, 15 February 2022

10:00 AM - 2:00 PM

Scadghill Farm, Stibb, Bude,  
Cornwall

EX23 9HN



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# Edward Hawkins: Youtube: Harvesting Sunlight

<https://www.youtube.com/watch?v=CaP3UUEYD5k>



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# What do Above Farms and Research tell us?

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# Importance of clover (RB209):

## Grazing of Grass/Clover Swards – Nitrogen

Generally little fertiliser nitrogen is needed on swards with an appreciable clover content. On average, a good grass/clover sward will give annual dry matter yields equivalent to that produced from about 180 kg N/ha applied to a pure grass sward. However newly sown grass clover leys may yield even more nitrogen depending on the percentage of clover. It is often difficult to decide how much nitrogen will be supplied from grass/clover as the clover content can be very changeable from year to year and within a given season. The following photographs indicate how to estimate clover content and assess nitrogen supply.

### Assessing nitrogen supply from clover

Percentage ground cover from clover

Potential nitrogen supply



180 kg/ha



240 kg/ha



300 kg/ha

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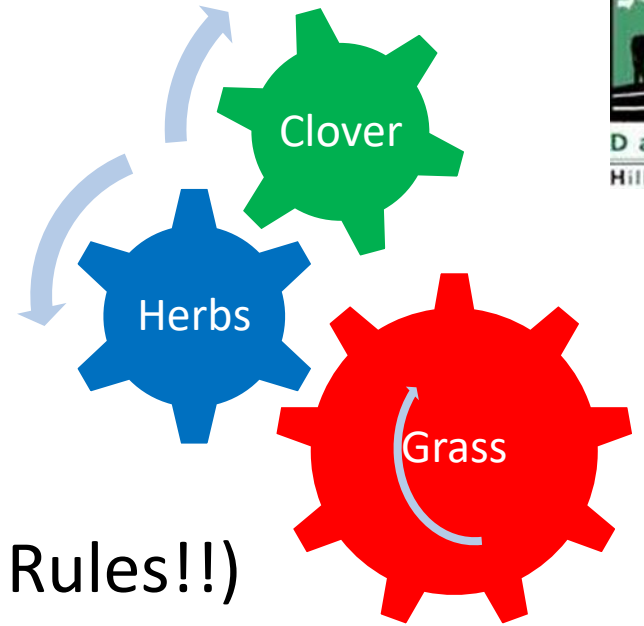
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# Biodiversity matters:

- Improved Yield; Species mutually Supportive:
- Less disease, as same species further apart (Covid Rules!!)
- Benefit Pollinators as in Bees and Butterflies
- Fertiliser Nitrogen Not Required
- Rotational Grazing → Improved Yield/ha



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# Future income Stream?? Carbon!!



## Paying farmers for soil organic carbon



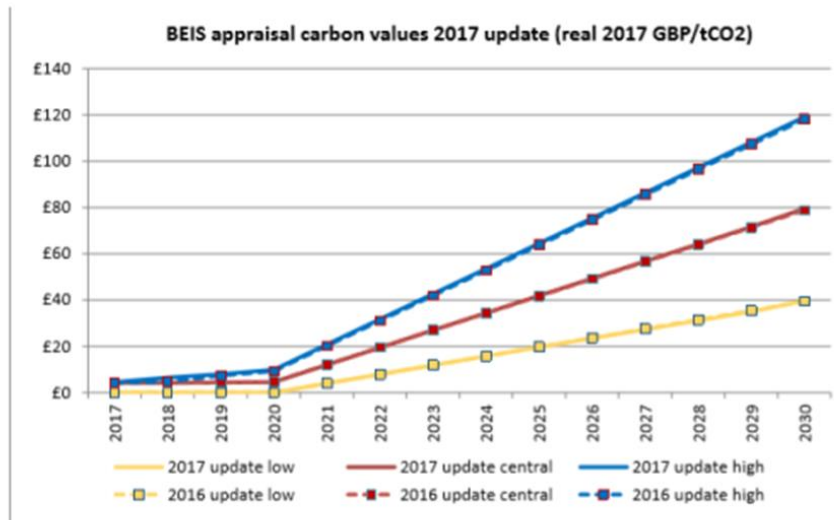
Jennifer Dungait @soilhealthxprt · Jan 3

Michael Gove says 'Farmers should be rewarded for organic content of soils.' Hurray! #ORFC19 #soilhealth @MikeGreenSustAg @Luppod61 @sectormentor @ADB0806 @

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### Who will pay?

- Polluters/off-setters
- Governments
- Insurance companies
- Consumers

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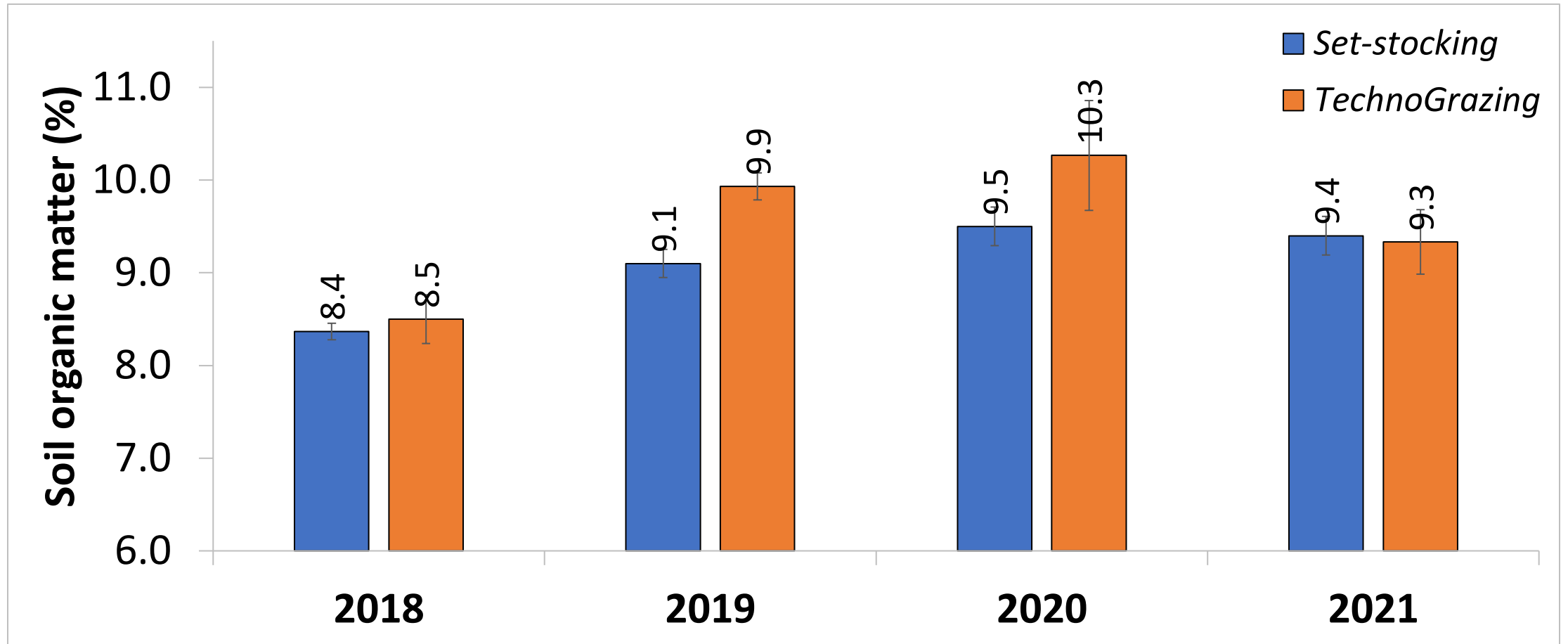
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# Soil Organic Matter



# How to increase Soil Organic Matter ? (SOC)



- Biodiverse Cropping: Increase Diversity above and Below Ground; Deep Rooting
- Long Rotations: Herbal Leys up to 40-60 days in Grazing Season.
- Build Soil Depth: Increases Soil Carbon Stock
- Reduce Soil Disturbance
- Keep Ground Covered.
- Encourage Above and Below Ground Diversity.
- Use Common Sense Farming (Regenerative) Practices.

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# Questions and Discussion

What would you do differently from today?

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