Duckspool Farm

"Operating a high profit dairy farm with medium levels of input"



James Bros Enterprises Ltd Duckspool Wiston Pembrokeshire SA62 4QB

Background

- > Duckspool Farm, Wiston, Mid Pembrokeshire
- Duckspool farm purchased in 2009 (300 acres)
- Part of James Bros. enterprise in partnership for 35 years
- BSC Agriculture at Harper Adams including a 12 month

placement in New Zealand (2004)

British Grassland Farmer of the Year 2017







Grass – 15t DM/ha grown in 2017



| | AgriNet - Grass Wedge | | | | | | | |
|---|---|--|---|---|---|--|--|--|
| AgriNet | www.agrinet.ie | | | | | | | |
| Farmer Date Daily Growth Farm Cover Total Area Total LU Weather | Rhys James 07/05/2017 31.4 (36.1) 2212 94.06 443 | Demand / Day Demand / Ha LU / Ha Cover / LU Short Term Silage Long Term Silage Rotation Length | 5416 57.6 4.71 151.17 0 (0Ha) 3 (11.2Ha) 20 | Rotation Last Week Area Unmeasured Post Grazing Cover Litre/Cow/Day kgMS/Cow Milk Quality KgMs/Ha YTD | 48 0 Ha 1500 26.62 (07/05) 2.05 F3.95% / P3.53 24 (105.26 Ha) | | | |
| Cover Sur | olus: 6925 Target Pre- | Graze Cover: 2651 | rget Line (2566) | Demand Line 📰 A | ctual Cover | | | |
| 3250 - 25 | | | | | | | | |
| 3000 - 26 | | | | | | | | |
| 2750 - 20 | 24 | | | | | | | |
| 2500 | 24 12 18 12 | | | | | | | |
| 2250 - | | 23 26 | | | | | | |
| 22.50 7 | | 20 12 | 10 4 | | | | | |
| | | | | 0 | | | | |
| | | | | A CONTRACTOR OF | | | | |
| | | | | 1 22 3 | | | | |
| 1750 - | | | | 22 2 | -12 2 | | | |
| 1750 - 1500 - | | | | 2 2 | | | | |
| 2000 - 1750 - 1500 - 1250 - | | | | 22 2 | | | | |
| 1750 - 1500 - 1250 - | 19 ¹² 5 ³¹ 34 ⁴ 3; | 23 21 11 7 3 6 10 8 Paddocks | 42 22 | 20 9 3 35 2 41 | 15 - 13 32 | | | |

| 24 | -Long Field- | Area | Cover | Growth | Grow/Day | Feed | Dave | |
|----|--------------------|------|-------------------------------|--------|----------|--------------------------|--|------|
| 26 | Rose Knock | 2.7 | Section in the section of the | | | | Days Com | ment |
| 17 | Clarrydale | 4.5 | 00 285 | | 00.0 | The second second second | 0.0 | |
| 19 | _13 Acre | 1.7 | 00 273 | | 00.0 | | Contraction of the local division of the loc | |
| 12 | Meadow - | 5.1 | 10 272 | | | | 0.4 | |
| 5 | Lower Batmans Hill | 2.6 | 90 254 | | 00.0 | 0210 | 1.2 | |
| 31 | Ridge | 4.3 | 10 250 | | - L.d | | 0.0 | |
| 34 | Angles Head 4 | 6.5 | 20 250 | | 12.8 | 1013 | | |
| 4 | Slade | 2.4 | 50 250 | 0 849 | 0.1 | 0021 | | |
| 33 | Oatlands | 3.6 | 30 237 | | | -100 | | |
| 23 | Cotland Moor | 3.0 | | | 47.9 | OLLI | | |
| 6 | Big Field | 4.72 | | | | 2559 | 0.5 | |
| 21 | Brake | 5.16 | | | 00.4 | 4012 | 0.7 | |
| 10 | Longlands 1 | 2.63 | 200 | | 9.1 | 4120 | | |
| 11 | Longlands a | 4.00 | 220 | 0 6 | 0. | 1070 | | |

Cows

- 2.7 m litres sold in 2018 from 480 cows
- Milk sold to Glanbia Cheese
- Cows average around 5800 litres/year, 474kg MS
- Fat 4.55%, Protein 3.63%
- Fed 1-1.3t concentrates per annum usually.
 1.6t this year due to the drought.
- Higher stocking rate 4.4 cows/ha platform.
 2.8/ha overall.
- Paddock grazed 12hr breaks set up in paddocks
- Grazing by day 10th Feb, night 1st March
- A.I 8 weeks, Bulls 4 weeks

| Milk Sold 2017 | Milk Sold 2018 | | | |
|------------------------|----------------------------|--|--|--|
| 1,896 kg MS/ha on MP | 2,090 kg MS/ha on platform | | | |
| 1,100 kg MS/ha overall | 1,267 kg MS/ha overall | | | |
| | | | | |

Machinery Operations and Staff



- Machinery is minimal- Silage carried out by a contractor, we mow and Tedd.
- Staff- Local people, A Herdsmanager, general farm worker + relief milker.
 - Slurry pumping via trailing shoe, undertaken by contractor.
- GPS controlled Fert Spreader used, Fert to grazing applied monthly. Machinery is shared between our other two farms

Are the extra cows producing marginal litres?

Our Comparable Farm Profit (CFP) costings 2017 data: -

- £2013/ha net profit before Rent, Finance, Depreciation, Tax and Drawings over all hectares we graze.
- Total CFP Expenses per litre have not risen since stocking at 4.4 cows/ha.
- > Simple forage based system, we can make more profit on a higher milk price year.
- We would be servicing the same debt with 3 cows per ha as 4.4 cows/ha for buying the farm.
- > Parcels of land within a four mile radius have been available to rent for silage.

Implementing the higher stocking rate

- Strong reliance on sourcing good quality silage to milk off in spring and early Autumn.
- > Housing and Feeding infrastructure needs to be good.
- We protect our average farm cover by using silage as a supplement when demand exceeds growth.
- > We religiously measure grass weekly using Agrinet to stay on track.
- > Herd is flat rate fed concentrates at 4 Kgs/day.
- > We get good response from concentrates, 1.3 litres per 1 kg av.





Conclusion

'Musts' for high profit dairy farm with medium levels of input on our farm: -

Measure grass (weekly)

Ensure top quality grass ahead of cows (must hit residuals 1500kg)

Fertilizer must be applied on time (strictly 3- 4 weeks)

Quality cows (no room for passengers)

Have a good source of quality silage

Good feeding infrastructure and housing



Thank you

Questions?

Email: rhysgrange@hotmail.com

Milk response to feeding concentrates at grass (Litres per cow)



Milk response to feeding concentrates at grass (Kg of milk solids)





- Cows are milked through a simple 28:56 Milfos parlour with ACR's
- 357 cow cubicle shed, in the process of extending to 547 cow cubicle shed, to house in calf heifers as well.



