The Importance of Soil Fertility during Dairy Expansion.

The Fertiliser Association of Ireland.

Spring Scientific Meeting 2015.

The Horse and Jockey Hotel.

Tuesday 3rd February 2015.

Sean O’ Donnell

Twitter: @Seanod281
Personal Introduction:

- Sean O’ Donnell
- Ballina, Co. Mayo
- Married to Jackie and three boys
- 2013 Nuffield Farming Scholar
- 2014 FBD/ Macra Young Farmer of the year
Farm Background

- Took over farm 2008.
- Milking 40 cows on 34 hectares in total.
- Calving 120 cows in 2015.
- Farming 60ha home farm.
  Contract rearing 26ha
  Silage 10ha
  Total 96ha
- Increasing to 150 cows.
2009: Baptism of Fire

- Poor milk price – 24c/l
- Cost of production – 16c/l
- Other costs – Infertility (both cows and grass)
- Used straight N – urea and can
New Focus

Cows + Grass = €£$!!!
<table>
<thead>
<tr>
<th>Year</th>
<th>Six week calving rate</th>
<th>Grass Grown</th>
<th>Utilised</th>
<th>Milk solids per ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>30%</td>
<td>8 tonnes</td>
<td>6 tonnes</td>
<td>699</td>
</tr>
<tr>
<td>2014</td>
<td>84%</td>
<td>13.7 tonnes</td>
<td>11.4 tonnes</td>
<td>1245</td>
</tr>
</tbody>
</table>

Cost of production: 19 c/l

“Brilliant at the Basics” - Matt Ryan.
• Prioritise Capital Expenditure.
• Limited Borrowings to Land and Cows.
• System Focused.
Grassland Management

- Cows out 10\textsuperscript{th} February.
- Housed 15-20\textsuperscript{th} November.
- Spring and Autumn rotation planners.
- Fed 550kg meal 2014.
Grassland Management

- 2008 – started measuring grass.
- Showed up which paddocks were NOT performing.
- 2009 Soil testing – 3 different soil types.
- Results: Mainly index 1 and 2, particularly low in P.
- Influenced cow fertility.
Grassland Management

- Started liming in 2010.
- Maintenance Fert + Gaining an Index.
- Took longer than expected.
- Mainly lime issue – Avg PH 5.55
Reseeding Programme

- Reseeded 90% of grazing block.
- 80% of overall farm.
- Preference is to power harrow.
- Broadcast seed.
Reseeding Programme

- 2 tonnes of Lime
- 3-4 bags of 10-10-20
- 15kg of grass seed
- Generally no clover
- 50/50 tetraploid/diploid
- More diploid on heavier soils
Drainage

- High Rainfall area.
- Got good land growing first.
- Drainage.
- Lime, P and K.
- Reseeding.
Current Soil Status

- 24 Paddocks
- PH avg – 6.0
- 14 Paddocks P index 3
- Remainder P index 2
- All paddocks K index 3
- Getting more value from slurry
Soil Fertility: A long road

- Go hard and fast.
- High P and K compounds.
- Put lime on first.
- Don’t rely on slurry.
- Treat lime the same as any other fertiliser.
Conclusion

• Focus on what drives the business.
• Cows and grass.
• Cannot afford to be complacent about soil fertility.
• Our biggest cost advantage is grazed grass.
• Need to grow as much as we can.
Questions??

“Building for the Future”