Silage budgeting on BETTER beef farms

This week, Ciarán Lenehan carried out vital winter fodder budgets on two of our BETTER beef farms.

With winter well and truly in on most of our BETTER beef farms, we paid a visit to two this week to assess fodder supply.

John McSweeney keeps 28 cows on 24ha near Lissarda in Cork. His sucklers are predominantly of Angus breeding. He also rears over 120 dairy calves, finishing some and moving the rest on as stores. His own suckler calves are finished as bulls, typically under 16 months.

Further north on the Offaly/Laois border, John Dunne will be calving over 120 continental-type cows next spring on a farm just shy of 300 acres. He brings his male calves to beef as bullocks and has reared 53 dairy calves in 2017.

Two very contrasting farms, but two farmers for whom winter has begun early.

“I’ve still got some weaned cows out but most of them are indoors. Parts of the farm are hilly and can take a bit of moisture, but the flatter ground is very difficult at the moment,” John McSweeney said.

In Offaly, things are somewhat worse.

“I was forced to house all of my cows after last Friday’s rain. I did 100 miles in one day ferrying loads from my out-farm. We’re about three weeks ahead of a normal year. I hadn’t yet vaccinated my calves and now I’m weaning them in a shed. It’s risky, but thankfully the first couple of batches were weaned without any health issues.”

We carried out fodder budgets with both farmers this week.

John McSweeney is confident that his average winter period will be 4.5 months from now, while early turnout of very light stock would be taken into account. This is one of the advantages of having lots of your spring stocking power in the form of yearling dairy-bred calves.

He will have calves coming in January, but there is a good degree of shed space that can be utilised should weather not allow for turnout of heavier suckler cows.

John Dunne’s average winter is also 4.5 months. Though he will be hoping to get a lot of his lighter stock out, as well as turning out cows with calves as they come, he has 300 forward stores to be finished late next spring.

The table below shows how much silage both will need this winter. The “req/head” column indicates how much each animal requires in a silage-only scenario and takes into account the portion of the diet that concentrates will account for.

Measuring

Our winter feeding focus magazine earlier this month gave a detailed breakdown on how to measure fodder reserves and budget based on animal requirements. With silage pits, multiply length x width x height of the clamp to derive a volume figure. This is extremely subjective, given that most clamps are not perfect cubic shapes. Where the clamp is sloped, use an average height figure based on your own estimation. Divide the final figure by 45 for 20% dry matter silage and 55% for 30% dry matter silage. This is another area where your silage test will come in handy.

Alternatively, assume that poor-averagе-or good-yielding first-cut silage will produce 7.5t, 8t or 9t per acre respectively. With second-cut, assume 3.4t or 5t per acre for poor- average-or good-yielding crops. However, guessing like this is far less accurate than taking the measuring tape to the clamp.

Those making bales can use Table 3 to calculate each bale’s equivalent weight as 25% dry matter pit silage. This will depend on the length of the wilting period and the weather at harvest. Bales mowed and cut on the same day in relatively dry conditions will have a dry matter of 25%, a 24-hour wilt will lift this figure to 30%, while a 48-hour wilt in hot sunny weather will produce 40% dry matter bales.

John McSweeney made all baled silage in 2017 and his average dry matter according to his silage analysis is approximately 30%. He has 470 bales in the yard, which equates to 366t of silage required for the winter (Table 2).

He is facing a silage deficit of 32t based on his requirements (Table 1), meaning that he needs to source 40 bales or the equivalent.

John Dunne has two pits and 80 bales of paddock silage. His silage is approximately 30% dry matter also. There is 923t of silage in John’s first pit and 414t in his second pit.

He also has 62t of silage in the form of saved paddock bales. At present, his budget reads a surplus of 35t of silage.

Example silage pit measurement

John Dunne - Pit 1

\[
(\text{Length} \times \text{Width} \times \text{Height}) \div 55 = 923 t
\]

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Table 1: Silage requirements for John McSweeney (Cork) and John Dunne (Offaly) this winter

<table>
<thead>
<tr>
<th>Req/head (1/ month)</th>
<th>Numbers</th>
<th>4.5 month requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suckler cow</td>
<td>1.4</td>
<td>28</td>
</tr>
<tr>
<td>Weanling 250kg</td>
<td>0.54</td>
<td>20</td>
</tr>
<tr>
<td>Springing heifers</td>
<td>1.3</td>
<td>32</td>
</tr>
<tr>
<td>Total silage required (tonnes)</td>
<td>398</td>
<td>1,364</td>
</tr>
</tbody>
</table>

Table 2: Fodder stocks for John McSweeney and John Dunne

<table>
<thead>
<tr>
<th></th>
<th>Tonnes from pit</th>
<th>Tonnes from bales</th>
<th>Total - required</th>
</tr>
</thead>
<tbody>
<tr>
<td>John McSweeney</td>
<td>366</td>
<td>-32</td>
<td></td>
</tr>
<tr>
<td>John Dunne</td>
<td>923 + 414</td>
<td>62</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 3: Converting round bales to 25% DM pit silage based on bale DM%

<table>
<thead>
<tr>
<th>Bale % DM</th>
<th>Equivalent tonnage as 25% DM pit silage</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>0.65</td>
</tr>
<tr>
<td>30</td>
<td>0.78</td>
</tr>
<tr>
<td>35</td>
<td>0.91</td>
</tr>
<tr>
<td>40</td>
<td>1.04</td>
</tr>
</tbody>
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Deficit

“I had a feeling that I’d be in a deficit. Thankfully there’s a man that I’m renting a shed from who has some silage to sell. At least you know where you stand with a budget and can take action in time,”
Prioritise heavy covers before the rain

The relatively dry weather over the past week has allowed farmers on dry land to continue on target with their autumn rotation planner. Those in the west or northwest have had difficulty keeping with the planner in recent weeks. While the current dry spell is offering some respite, the majority of farmers have not been able to get cows back out to grass.

Autumn-calved cows are the priority group to get out and keep out where possible. With the current dry weather, farmers on heavy land that have heavy grass covers on some paddocks should prioritise light stock, weanlings or sheep to graze off these fields, as heavy covers will deteriorate over the winter, reducing grass quality in early spring. The earlier these covers can be grazed off the more high DMD grass will be available for grazing next spring. Weanlings are still out at grass in several areas. On drier farms some beef cattle are still being supplemented with meal at grass and will be slaughtered off grass in the coming weeks. In most cases, farmers on dry ground have 60-70% of the farm closed, with the remainder to be closed in the coming weeks. On heavy farms the target is to have the entire farm closed by early to mid-November if not already closed.

Where cattle are housed, they should be watched closely for any early signs of pneumonia. Make sure that air flow through sheds is adequate, but also ensure that there are no draughts.

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