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## Livestock Section in the Wedge Screen

After you have entered the grass covers and saved to move to Grass Wedge; if you scroll down underneath the Grass Wedge bar chart you will see the Livestock Table – as shown below. We are keen to capture this livestock data immediately after capturing the grass cover data since the consumption of measured grass by livestock is such an important part of the grass supply and demand process.

**Fig 1. Livestock Table**

Management Help

Rotation Length (days)  Residual Height (cm)

Target Pre Grazing (kg DM/ha)

Edit Target Pre Grazing  Display a demand line assuming no meal or silage needed

[SAVE AND UPDATE WEDGE](#)

|                | NUMBER OF STOCK                  | AVERAGE KG LWT                   | GRASS INTAKE                     | MEAL INTAKE                    | SILAGE INTAKE                  | TOTAL INTAKE                      | MOB   |
|----------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|-----------------------------------|---|
| Spring Milkers | <input type="text" value="100"/> |                                  | <input type="text" value="12"/>  | <input type="text" value="3"/> | <input type="text" value="3"/> | <input type="text" value="18.0"/> | Mob 1 <input type="button" value="Delete"/> |
| Autumn Milkers | <input type="text" value="0"/>   |                                  | <input type="text" value="0"/>   | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/>    | Mob 1 <input type="button" value="Delete"/> |
| 0 - 6 months   | <input type="text" value="0"/>   | <input type="text" value="0"/>   | <input type="text" value="0"/>   | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/>    | Mob 1 <input type="button" value="Delete"/> |
| 6 - 12 months  | <input type="text" value="30"/>  | <input type="text" value="300"/> | <input type="text" value="6.0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="6.0"/>  | Mob 1 <input type="button" value="Delete"/> |
| 1 - 2 years    | <input type="text" value="30"/>  | <input type="text" value="450"/> | <input type="text" value="9.0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="9.0"/>  | Mob 1 <input type="button" value="Delete"/> |
| Dry Cows       | <input type="text" value="0"/>   | <input type="text" value="0"/>   | <input type="text" value="0"/>   | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/>    | Mob 1 <input type="button" value="Delete"/> |

This is where you enter the number of stock grazing on the measured platform of grass, and also enter here their expected daily grass intake.

For Dairy Cows you must enter their daily DM intake. For beef cattle their daily intake is calculated based on 2% of their average weight.

Normally the stock details will be carried forward from one cover to the next. If you make changes you must press the green 'save and update wedge' button as seen above.

## Rotation Length

The Rotation length is the number of days it takes the herd to rotationally graze the whole farm. Rotation length can be calculated by dividing the total area available for grazing by the number of hectares grazed per day.

In the example in Fig. 1 above, the 'Rotation Length (days)' is set at 21. The rotation length is used as part of the calculation of the demand line in the wedge.

In Spring, if you let stock out on February 1<sup>st</sup>, a suitable rotation to start with is 100. As you move through February and March, you speed up as grass starts growing, and you end up with a rotation length of 21 in the 2<sup>nd</sup> week of April. Tip: Do a spring rotation planner and this will show suitable rotation lengths for different weeks during spring.

In summer, the most typical rotation length to use is 21. If growth is well ahead of demand, you can change this down towards 18. If growth is poor and less than demand, move upwards towards a rotation length of 24.

In autumn, from early September, you need to start slowing the rotation length down again.

Approximate Rotation Length guideline to be followed during the grazing season

|                               |              |
|-------------------------------|--------------|
| Late January – Early February | 100 days     |
| Early March                   | 65 days      |
| Early April                   | 21 days      |
| May / June / July             | 18 – 21 days |
| August 15                     | 20 – 22 days |
| September 1                   | 25 days      |
| October 1                     | 40 days      |
| November 1                    | 45 days      |

## Residual Height or Residual Cover

The 'Residual Height' displayed in Fig 1 above is 4cm. This is a very typical value to use on almost all farms. A residual of 4cm is the same as 0 kg /DM/ha. This example above is entering the residual in centimetres, however you can change this to 'Residual Cover' in the 'Farm Tab' screen. On sheep

farms where grass is grazed very low, a value of 3cm could be entered here. Poor grazing would be reflected in a residual height of 5cm where paddocks are consistently not being grazed out correctly.

## Grass Intake

In the example in Fig 1 above there are 100 spring milkers consuming 12 kgs/day of grass dry matter. The rotation length and these two numbers are the key numbers from this screen.

In this example, the farm also has young stock grazing on the same measured platform as the cows. If you enter the estimated live weight of these stock, the system will estimate grass intake at 2% of body weight.

The intake of lactating sheep and their lambs is estimated from their weeks after lambing.

The meal and silage intake is nice to have but only the grass intake is used in calculations.

Note that there is another document titled 'How is Demand Calculated' with examples about grass intake and how these values are set and how they are used in calculations.

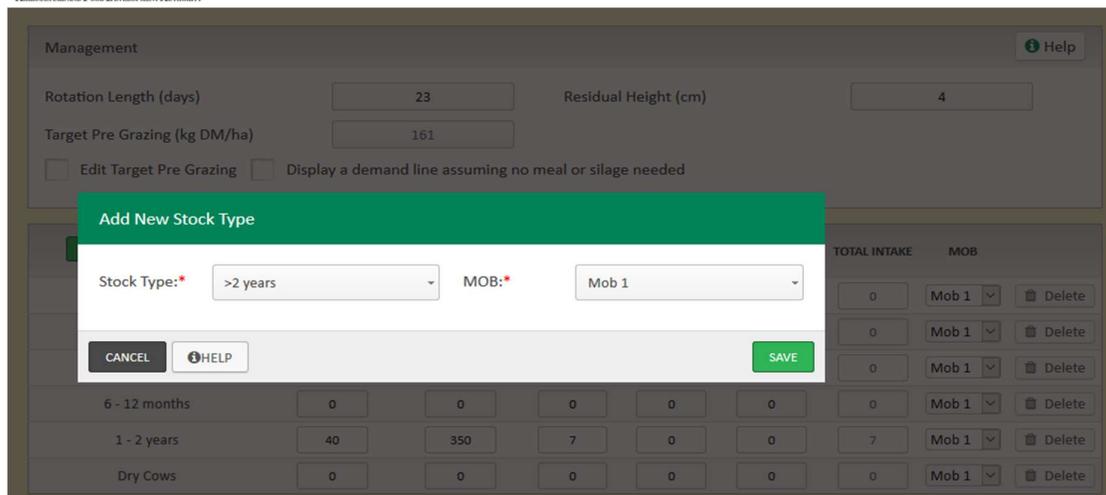
## Use of Mobs

Mobs is a system to track a specific group of animals around a specific group of paddocks.

For example, you have cows grazing on 20 paddocks on one side of a road and you have young stock grazing 15 paddocks on the far side of the road or on an outlying farm. If you measure all 35 paddocks on the same day, you can get a wedge for all 35 paddocks, or you can get a wedge for the cows on the 20 paddocks, and also get a wedge for the young stock on their 15 paddocks. If the cows are short of grass and the young stock have too much grass, you could walk the cows across the road as a short-term solution.

## Stock Types

In Fig 1 above, if you click on the green 'Add New' button on the top left of Fig 1, the following screen appears.



|  | 6 - 12 months | 1 - 2 years | Dry Cows | TOTAL INTAKE | MOB   |
|--|---------------|-------------|----------|--------------|-------|
|  | 0             | 40          | 0        | 0            | Mob 1 |
|  | 0             | 350         | 0        | 7            | Mob 1 |
|  | 0             | 0           | 0        | 0            | Mob 1 |

On 'Stock type' click on the dropdown and select the category of stock you want to add. Over on the right-hand side of this box you can allocate the stock group selected to whichever 'mob' is appropriate. Click save.

Note that there are 4 possible groups of dairy milking cows and all 4 can be renamed (using the 'Edit Type Names' green button as shown above). This might be handy if you have more than 1 group of cows coming in to the parlour. All changes are copied forward to future weeks.

## Target Pre –Grazing Yield - How do you calculate your target pre – grazing yield?

Stocking Rate (cows/ha) x Allowance (kg DM/cow/day) x Rotation length (days) + Residual (what will be left in the paddock after grazing)

### Example:

4 cows/ha x 16 kg DM/cow/day x 20 days + 100 kg DM/ha (residual) = 1,380 kg DM/ha

Target pre-grazing yield = 1,380 kg DM/ha

This target, alongside the residual target, should be used with the feed wedge to help you to identify both immediate and upcoming surpluses and deficits throughout the main grazing season (April-August).

Target pre-grazing yields between 1,300 – 1,500kg DM/ha with high leaf content.

If your calculated pre grazing yield is <1,200kg DM/ha then you will need to 'Edit the pre-grazing yield' to 1,300 - 1,500kg DM/ha.

To do this in the 'Grass Wedge' screen, scroll down to the Management box under the wedge.

Click the box 'edit target pre-grazing', type your target figure into the box & click 'save and update wedge'.

Once the correct pre-grazing yield is achieved, it will be easier to achieve the ideal post grazing height of 4cm.

Continually grazing paddocks at a low pre grazing yield (<1,100kg DM/ha) will lead to reduced growth rates.

Research has shown that, controlling mid-season pre-grazing yields, converting high quality grass into milk solids adds **€150/ha profit**.