**SLO: to find out how long animals can stay in a paddock**

**Feed Budgeting**

 **- a way of calculating how long a mob can stay.**

**Why**

* to find out how long the stock stay in a paddock
* either now or 3 months from now.
* will they need hay or silage and how much ?
* will I run out of grass and when?

**Step One. : How much grass do I have?**

TASK: To measure how much grass there is on the rugby field.

How:

1. Collect a plastic bag and a set of scissors.

1. Collect a plastic square.
2. Choose a place on the field. Place the square on the ground. Cut all the grass from inside the square down to the ground. Place in the plastic bag.

4. Put into a foil tray. This will dried over night to remove the water.

5. Name a foil tray. Add the grass.

6. Place on the front bench. This will be dried over night to remove the water.

1. Record Tray Wt = 10 grams
2. Tray + dry Grass = ?

Grass wt = ( - 10 ) = gm’s grass for a 15cm2 square.

 In kgs DM /ha = Grass wt \* ? = kgs DM/haDefinitions

How much they leave behind that can be grazed next time.

 Called the RESIDUAL.

Dry Matter (DM)

= How much Dry Matter ( not water) is actually present in a food. This Dry Matter has all the energy, protein and other goodness.

NOTE: water has no food value.

Grass = 20 % DM so to eat 1 kg of DM a ewe must eat 5 kgs of wet grass.

ie Hay = 80 % DM so a 25kg bale = 20 kg DM

Allowance = how much DM a ewe needs every day.

ie Maintenance = 1.0 kg(s) per day.

 Lactation = 3.0 kg(s) per day.

 Flushing = 2.5 kg(s) per day.

The ewes will not eat all of this. The higher the Allowance, the more residual they leave behind.

How long can This mob stay in the paddock

Step One

How much grass do I have?

1) Total Grass = Padd size \* kgsDm/ha

2) Amount needed = No. animals \* allowance

**3) Days in padd = Total grass**

 **Amount needed.**

a)

The paddock is 15 ha in size with 2000 kgs DM/ha. You have 2000 ewes being flushed.

How long can they stay in this paddock.

No Days = .

b) Problem: for some reason, you want the animals to stay in that paddock for 10 days. What else could you do to feed them with to keep them at an allowance of 2 kgsDM ?

Options?

**Allowance = Total grass**

 **No Days \* No Animals.**

**Allowance = 30000**

 **10 \* 2000**

 **= 1.5 kgs DM per animal per day.**Silage is a good choice. Ewes like it and it is easily digested so they will gain weight. Some silage will then be feed out each day with some grass to flush the ewes.

BUT how much

1) If you are staying 10 days in the paddock, what is the ewe’s new allowance = kgsDM/day.

2) So each ewe needs to get silage each day.

 A total for 2000 ewes = kgs a day.

But silage is only 30%DM so

3) How much silage (wet weight) must be put into the feed out wagon each day = .