

PastureWatch™

The Green Feed Paddock Calculator

Overview

Green Feed Budgeting is a method of working out the balance between what animals need and what is available and helps us manipulate either one of those to suit our pasture management. This calculator is designed to help you do the calculations necessary for: feed budgeting at a paddock level. Decisions may need to be made about how feed is managed over the whole farm. Other tools, such as The pasture budgeting system in PastureWatch™ or PAM and 'Pro Plus', available through Prograze are designed to feed budget on a whole farm basis;

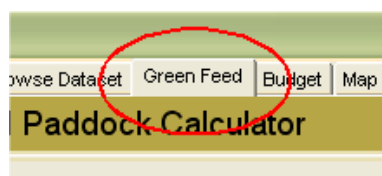
This calculator relies on you having the ability to estimate FOO™ (Feed On Offer) of the paddock and access to the website www.pasturesfromspace.csiro.au or to subscribing to the Pastures from Space paddock level PGR™ service through Fairport Technologies.

The information used in this paddock calculator are based on work from the WA Dept of Agriculture Wool Program and Grazfeed:

Acknowledgements to Mike Hyder, WA Department of Agriculture for the Green Feed Budgeting and Sheep Production information and to David Weaver WA Department of Agriculture.

Where to find it

Click on the “Green Feed” tab in PastureWatch.



Setting your Defaults

On the “Lists and Settings” page you will see a grid where you can add to or edit the default list of livestock types and their daily intake settings.

Green Feed Paddock Calculator

Autumn Deferred Grazing

Autumn Strip Grazing

Spring Strip Grazing

Grazing to Maintain FOO

Paddock Outcome Grazing

Livestock Outcome Grazing

Lists and Settings

Print

Help

Livestock Types

① + - ↶ ↷

| Stock Type | Spring Intake | Autumn Intake | Optimum FOO |
|-------------------------------------|---------------|---------------|-------------|
| ▶ Dry Adult 60Kg Max LWG (250g/h/d) | ② 2.1 | 2 | 2500 |
| Dry Adult 60Kg Maintain LW | 2.1 | 2 | 2200 |
| Dry Adult 60Kg Rec'd Gain (90g/h/d) | 2 | 1.5 | 2100 |
| Dry Adult 50Kg Max LWG (250g/h/d) | 2 | 1.7 | 2200 |
| Dry Adult 50Kg Maintain LW | 2.2 | 1.8 | 2000 |
| Dry Adult 50Kg Rec'd Gain (80g/h/d) | 2.1 | 1.6 | 2000 |
| Hogget 40Kg Max LWG (250g/h/d) | 1.9 | 1.3 | 1800 |
| Hogget 40Kg Maintain LW | 1.8 | 1.4 | 1800 |
| Hogget 40Kg Rec'd Gain (70g/h/d) | 1.5 | 1.2 | 1700 |
| Weaners 30Kg Max LWG (250g/h/d) | 1.3 | 1.4 | 1500 |
| Weaners 30Kg Maintain LW | 1.5 | 1 | 1400 |
| Weaners 30Kg Rec'd Gain (60g/h/d) | 1.3 | 1 | 1400 |

- ① Click the + button to add new stock types
- ② Enter the intake for the stock type / season

Using the Green Feed Paddock Calculator

Paddock Outcome Grazing

| Autumn Deferred Grazing | Winter Spring Grazing Strategy Calculator for a Paddock Outcome | |
|--|---|--|
| Autumn Strip Grazing | Paddock Area | <input type="text" value="25.0"/> |
| Spring Strip Grazing | Budgeted Grazing Days: | <input type="text" value="12"/> |
| Grazing to Maintain FOO | Paddock Outcome Type: | Control capeweed dominance |
| Paddock Outcome Grazing | Daily Intake for Select Type: | <input type="text" value="2.1"/> Kg/Hd/Day |
| Livestock Outcome Grazing | Current Feed On Offer: | <input type="text" value="2500"/> Kg/Ha |
| Lists and Settings | Optimum Feed On Offer: | <input type="text" value="1500"/> Kg/Ha |
| Print | Pasture Growth Rate: | <input type="text" value="45"/> Kg/Ha/Day |
| ? Help | <input type="button" value="Calculate Results"/> | |
| Results Days to reach optimum FOO = <input type="text"/> (With no grazing) Grazing days available = <input type="text" value="12"/> (At optimum FOO) Pasture available for the period = <input type="text" value="1459"/> (Assuming 15% wastage) Stocking Rate = <input type="text" value="57.9"/> Tally = <input type="text" value="1447"/> | | |

Enter data as follows, then click on the **Calculate Results** button:

Paddock Area: Enter the grazable area of the paddock you intend to strip graze.

Budgeted Grazing Days: Enter how many days you want the calculation to use. When pasture is growing rapidly you will need to run shorter budgets. When the pasture is growing slowly, you can do budgets over several weeks. It is recommended that 30 days is the maximum budget.

Paddock Objective: This scenario is set up to help define what target FOO you need. The need maybe for cropping next season, cutting hay or controlling insects. Choose an aim by clicking on the blue box that suits. This will determine the optimum to achieve it.

Current Feed On Offer: Estimate the FOO level using the recommended method of calibration cuts and an average of the paddock. Remember to take into account all parts of the paddock where stock will be grazing.

Optimum Feed On Offer: Check the [online help](#) topic “Daily intake vs FOO Levels” ... “Pasture Vegetative Phase” to ascertain the ideal stock class for the purpose and the optimum FOO level.

Pasture Growth Rate: Pasture growth rate obtained from Pastures from Space or another method.

Results

Daily intake: This calculation is done using the FOO levels chosen and present as well as the paddock outcome chosen. Click on help and look for “Daily intake vs FOO Levels” ... “Pasture Vegetative Phase”.

Days to Reach Target FOO: This is the time it will take for the paddock to reach the target FOO. Check the PGR regularly.

Pasture Available for the Period: This is a calculation box that works out the difference between what’s in the paddock and what is needed.

Stocking Rate and Tally: These results are based on the paddock area and the daily intake calculated.

Grazing to Maintain FOO

| Winter Spring Grazing Strategy Calculator to Maintain a Paddock FOO Level | |
|--|--|
| Autumn Deferred Grazing | |
| Autumn Strip Grazing | Mob Tally: <input type="text" value="500"/> |
| Spring Strip Grazing | Budgeted Grazing Days: <input type="text" value="3"/> (Up to 14 days when fast pasture growth. Up to 30 when slow) |
| Grazing to Maintain FOO | Stock Type: <input type="text" value="Dry Adult 50Kg Maintain LW"/> |
| Paddock Outcome Grazing | Daily Intake for Select Type: <input type="text" value="2.2"/> Kg/Hd/Day |
| Livestock Outcome Grazing | Current Feed On Offer: <input type="text" value="2500"/> Kg/Ha |
| Lists and Settings | Optimum Feed On Offer: <input type="text" value="2000"/> Kg/Ha |
| Print | Pasture Growth Rate: <input type="text" value="45"/> Kg/Ha/Day |
| ? Help | <input type="button" value="Calculate Results"/> |
| Results Days to reach optimum FOO = <input type="text" value="0"/> (With no grazing) Grazing days available = <input type="text" value="3"/> (At optimum FOO) Pasture available for the period = <input type="text" value="614"/> (Assuming 15% wastage) Stocking Rate = <input type="text" value="93.1"/> Grazing area needed = <input type="text" value="5"/> | |

Enter data as follows, then click on the **Calculate Results** button:

Mob Number: enter the number of stock in the mob. They will all need to be of one stock class.

Time period for the budget: Enter how many days you want the calculation to use. When pasture is growing rapidly you will need to run shorter budgets. When the pasture is growing slowly, you can do budgets over several weeks. It is recommended that 30 days is the maximum budget.

Class of Stock: Click on the blue box to see a selection of stock classes and production goals. This choice sets an optimum FOO level for achieving the goal. You can choose to use this or enter your own optimum FOO level in the window. The class of stock and the optimum FOO dictates what feed intake level is used for the calculation of demand.

Daily intake: Derived from your default settings for the selected stock type.

Current Feed On Offer: Estimate the FOO level using the recommended method of calibration cuts and an average of the paddock. Remember to take into account all parts of the paddock where stock will be grazing.

Optimum Feed On Offer: Check the [online help](#) topic “Daily intake vs FOO Levels” ... “Pasture Vegetative Phase” to ascertain the ideal stock class for the purpose and the optimum FOO level.

Pasture Growth Rate: Pasture growth rate obtained from Pastures from Space or another method.

Results

Pasture Available for the Period: This is a calculation box that works out the difference between what’s in the paddock and what is needed.

Days to reach optimum FOO with no grazing: This is the time it will take for the paddock to reach the target FOO. Check the PGR regularly.

Stocking Rate and Grazing Area Needed: These results are based on the mob tally, the daily intake and the feed available.

Livestock Outcome Grazing

| Green Feed Paddock Calculator | |
|--|---|
| Autumn Deferred Grazing | Winter Spring Grazing Strategy Calculator for a Livestock Outcome |
| Autumn Strip Grazing | Paddock Area: <input type="text" value="25.0"/> |
| Spring Strip Grazing | Budgeted Grazing Days: <input type="text" value="12"/> (Up to 14 days when fast pasture growth. Up to 30 when slow) |
| Grazing to Maintain FOO | Stock Type: <input type="text" value="Dry Adult 50Kg Maintain LW"/> |
| Paddock Outcome Grazing | Daily Intake for Select Type: <input type="text" value="2.2"/> Kg/Hd/Day |
| Livestock Outcome Grazing | Current Feed On Offer: <input type="text" value="2500"/> Kg/Ha |
| Lists and Settings | Optimum Feed On Offer: <input type="text" value="2000"/> Kg/Ha |
| Print | Pasture Growth Rate: <input type="text" value="45"/> Kg/Ha/Day |
| ? Help | <input type="button" value="Calculate Results"/> |
| Results Days to reach optimum FOO = <input type="text"/> (With no grazing) Grazing days available = <input type="text" value="12"/> (At optimum FOO) Pasture available for the period = <input type="text" value="959"/> (Assuming 15% wastage) Stocking Rate = <input type="text" value="36.3"/> Tally = <input type="text" value="908"/> | |

Excess FOO ... Accept increased production of consider harvesting silage or hay

Enter data as follows, then click on the **Calculate Results** button:

Paddock Area: Enter the grazable area of the paddock you intend to strip graze.

Budgeted Grazing Days: Enter how many days you want the calculation to use. When pasture is growing rapidly you will need to run shorter budgets. When the pasture is growing slowly, you can do budgets over several weeks. It is recommended that 30 days is the maximum budget.

Class of Stock: Click on the blue box to see a selection of stock classes and production goals. This choice sets an optimum FOO level for achieving the goal. You can choose to use this or enter your own optimum FOO level in the window. The class of stock and the optimum FOO dictates what feed intake level is used for the calculation of demand.

Daily intake: Derived from your default settings for the selected stock type.

Current Feed On Offer: Estimate the FOO level using the recommended method of calibration cuts and an average of the paddock. Remember to take into account all parts of the paddock where stock will be grazing.

Optimum Feed On Offer: Check the [online help](#) topic “Daily intake vs FOO Levels” ... “Pasture Vegetative Phase” to ascertain the ideal stock class for the purpose and the optimum FOO level.

Pasture Growth Rate: Pasture growth rate obtained from Pastures from Space or another method.

Results

Pasture Available for the Period: This is a calculation box that works out the difference between what's in the paddock and what is needed.

Days to reach optimum FOO with no grazing: This is the time it will take for the paddock to reach the target FOO. Check the PGR regularly.

Stocking Rate and Tally Needed: These results are based on the paddock area, the daily intake and the feed available.

Strip Grazing

| Autumn Winter Period: Strip Grazing Area Calculator | |
|--|---|
| Autumn Deferred Grazing | |
| Autumn Strip Grazing | Mob Tally: <input type="text" value="500"/> = Stocking Rate: <input type="text" value="20.0"/> |
| Spring Strip Grazing | Paddock Area: <input type="text" value="25.0"/> |
| Grazing to Maintain FOO | Grazing Days: <input type="text" value="3"/> (1-4 Days Recommended) |
| Paddock Outcome Grazing | Stock Type: <input type="text" value="Dry Adult 50Kg Maintain LW"/> |
| Livestock Outcome Grazing | Daily Intake for Select Type: <input type="text" value="1.8"/> Kg/Hd/Day |
| Lists and Settings | Current Feed On Offer: <input type="text" value="2500"/> Kg/Ha |
| Print | Desired Residual Feed On Offer: <input type="text" value="1200"/> Kg/Ha |
| ? Help | Paddock Width: <input type="text" value="150"/> m. <input type="button" value="Calculate Results"/> |
| Results Strip Area = <input type="text" value="2.08Ha"/> Strip Length = <input type="text" value="138.5m"/> | |

En

ter data as follows, then click on the **Calculate Results** button:

Mob Tally: Enter the number of stock in the mob. They will all need to be of one stock class.

Paddock Area: Enter the grazable area of the paddock you intend to strip graze.

Budgeted Grazing Days: Enter how many days you want the calculation to use. When pasture is growing rapidly you will need to run shorter budgets. When the pasture is growing slowly, you can do budgets over several weeks. It is recommended that 1-4 days is used.

Class of Stock: Click on the blue box to see a selection of stock classes and production goals. This choice sets an optimum FOO level for achieving the goal. You can choose to use this or enter your own optimum FOO level in the window. The class of stock and the optimum FOO dictates what feed intake level is used for the calculation of demand.

Daily intake: Derived from your default settings for the selected stock type.


Current Feed On Offer: Estimate the FOO level using the recommended method of calibration cuts and an average of the paddock. Remember to take into account all parts of the paddock where stock will be grazing.

Desired Residual Feed On Offer: This is the amount of feed you want left in the strip once you move the stock. It is influenced by the time of the season and class of stock.

Area of strip: This is the area needed to be available to the mob. It is a calculated value. Insert the **Width of the paddock** so that the **Length of the strip** can be calculated. This is the distance the fence needs to be moved.

The difference between the Autumn and Spring Strip Grazing tabs is that a different daily intake value is used for the different periods of the year.

Autumn Deferred Grazing Tab

| | |
|--|---|
| Autumn Deferred Grazing | <p style="text-align: center;">Autumn Winter Deferred Grazing Days Calculator to Achieve a Desired FOO</p> <p>Current Feed On Offer: <input type="text" value="800"/> Kg/Ha</p> <p>Target Feed On Offer: <input type="text" value="2200"/> Kg/Ha</p> <p>Current Pasture Growth Rate: <input type="text" value="34"/> Kg/Ha/Day</p> <p style="text-align: right;"><input type="button" value="Calculate Results"/></p> <p>Results</p> <p style="text-align: center;">Days to Reach the Target Feed On Offer: <input type="text" value="41"/></p> |
| Autumn Strip Grazing | |
| Spring Strip Grazing | |
| Grazing to Maintain FOO | |
| Paddock Outcome Grazing | |
| Livestock Outcome Grazing | |
| Lists and Settings | |
| Print | |
|  Help | |

Enter data as follows, then click on the **Calculate Results** button:

Current Feed On Offer: Estimate the FOO level using the recommended method of calibration cuts and an average of the paddock. Remember to take into account all parts of the paddock where stock will be grazing.

Target Feed On Offer: Your choice of FOO that you want to have before grazing a paddock.

Pasture Growth Rate: Pasture growth rate obtained from Pastures from Space or another method.