

How to calculate whole farm feed supply

Whole farm feed supply refers to the amount of feed available to livestock during a pre-determined period. It is an important concept in livestock businesses as the number of livestock managed in a given area (stocking rate) is dependent on it.

Stocking rate is an important productivity measure as it is a key driver of feed utilisation. Livestock enterprise comparative analysis shows that the more profitable farm managers tend to have higher levels of feed utilisation. Farm financial assessments and analysis shows that feed utilisation is an important driver of profit in livestock businesses primarily because production per hectare is dependent on it.

What you will need to use this tool.

1. The location of the farm
2. The pasture types
3. The area of land categorised by pasture type
4. The annual rainfall in millimetres
5. An assessment of opening pasture inventory in January
6. An estimate of pasture utilisation
7. An estimate of the variability in feed supply

What are the outputs of the tool?

4. The whole farm feed supply for the year measured in kilograms of dry matter per hectare.
5. The calculated average annual stocking rate based on your feed utilisation
6. A whole farm pasture growth rate graph
7. Scenarios to examine the impact of feed surplus or feed deficit

The amount of feed supplied by pasture growth is unique to each farm. Soil type, pasture type, land class and soil fertility are all key determinants of whole farm feed supply.

The whole farm feed supply tool shows how the proportion of different pasture types impacts whole farm feed supply which in turn impacts stocking rate. The tool delivers a whole farm pasture growth curve which is specific to your farm and resource base.

The tool allows for scenarios to be run to assist in understanding the extent to which additional livestock will be required to consume any surplus feed or to manage feed purchases during times of feed deficit.

The tool calculates a stocking rate based on:

- the calculated pasture growth over the year
- opening and closing pasture inventory and
- utilisation levels which can be adjusted by the user.

The tool uses drop down pasture growth tables for NSW data zones which are available on the Evergraze website. Where pasture growth data doesn't represent what you consider to be accurate

for your area it is possible to create your own pasture growth curves using your own monthly pasture growth rate data.

The tool allows for scenario analysis by amending the results using the feed availability factor. For example, if you are looking to consider the impact of drought you can enter -30% in the September to November months to establish the extent to which supplementary feeding will be required.