Examining grazing in mixed farms using GrassGro

GrassGro was primarily developed to model grazing on pastures, however, in mixed farm systems stock will often feed on crop stubble or dual-purpose cereals for part of the year. There are a variety of situations in which it is desirable to model the effects of moving stock off a pasture and onto a crop. GrassGro can be applied to these situations using the Production Feeding rule, which allows stock to be taken off a pasture and be given a diet analogous to either a dry crop stubble or a green cereal crop.

We have used this approach to design a GrassGro Farm System that represents a wether flock grazing a crop stubble over summer. In this case, stock are moved into the ‘crop stubble’ in mid-December and two different production feeding rules are applied to simulate how the crop stubble diet will change over time. This Farm System is being distributed with GrassGro v3.1, and is also available to GrassGro users via the GrazPlan website. A supporting document explaining the simulation of a stubble feeding system in GrassGro is also available.

A similar approach has been taken to examine the indirect benefits of grazing a dual-purpose cereal crop during winter in southern Victoria. The GrassGro analyses performed suggested marked differences in production and gross margins depending on the timing of the grazing period of the cereal crop.

The Farm System and description of how it was applied (poster, paper) are available on the GrazPlan website.

New GrassGro Issues

A number of new standard GrassGro Issues are available on the GrazPlan website. These include:

- **Pasture comparison** – compares how different pastures influence the performance of a Farm System.
- **Farm System comparison** – a useful way of examining a number of combined changes to a Farm System.
- **Feeding management & costs** – examines the effects of changes in feeding management as feed costs change.

GrassGro v3.1 released

The latest version of GrassGro (v3.1) has just been released. GrassGro v3.1 retains the same basic interface but includes a number of new features aimed at making GrassGro easier to use and more flexible.

One of the highlights of GrassGro v3.1 is the new soil defaults atlas, which provides typical soil parameters for a number of different soil types within each region. The soil defaults atlas increases the capacity for Farm Systems to be set up quickly and simply in GrassGro.

Another feature of GrassGro v3.1 is the capacity to change the costs and prices of goods over time. For example, historic costs for supplements can be used, to reflect higher feed prices during drought. Prices received for selling stock can now be scaled to the time of year, allowing for common fluctuations in price during each year.

Other features of GrassGro v3.1 include changes to the reports. Multiple reports can now be used for an analysis or acceptability test, while designing reports has been made more flexible with the capacity for inclusion of calculated functions in charts and tables.

To obtain a copy of GrassGro v3.1, contact Horizon Agriculture.

GrassGro Help

Support is available for all GrassGro users. If you need assistance applying GrassGro to examine a grazing systems management question, contact Karel Mokany:

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