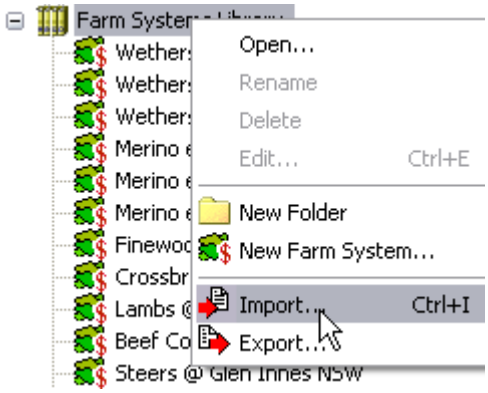
GrassGro 3

Simulating the use of crop stubble feeding to minimise supplement feeding costs

GrassGro 3 is unable to provide paddock rotation to a crop stubble paddock. However, it can be mimicked by introducing the animals to a feedlot and production feeding them using an Adlib feeding rule.

To load an example Farm System, you can import the one on the CD into your Farm System library.



Some details of the example Farm System:

Location	Wagga Wagga
Enterprise	Wethers
Stocking rate	15/ha
Shearing	15 Dec
Replacement	Sell – 31 Dec, Buy - 1 Jan
Feeding	Move to stubble (feedlot) 15 Dec, Remove on 30 Mar. Feed wheat straw and wheat grain.
Maintenance feed	Feed in paddock, applying the rule; If animal condition falls to 1.5 during 1 Jan to 31 Dec feed to maintain condition of the thinnest animals

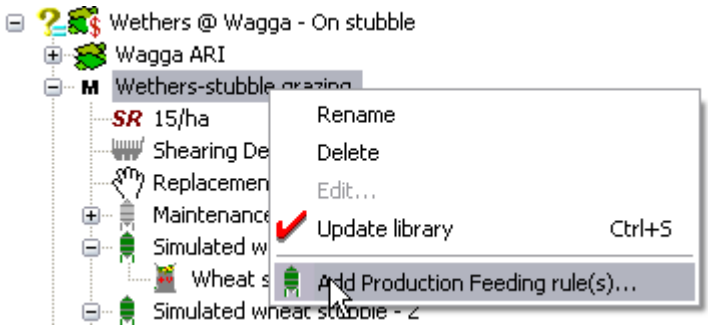
How to configure a Farm System as in the example.

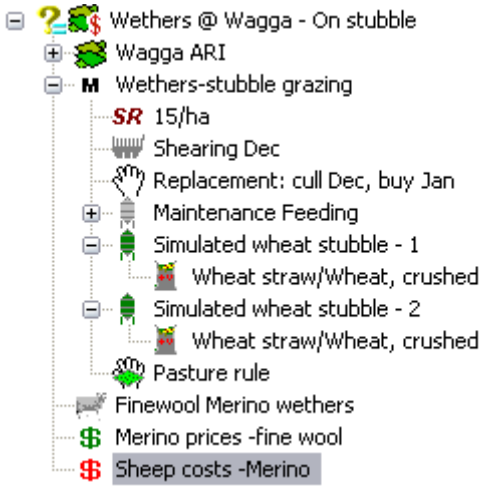
1. Set the costs of the supplement ingredients to $0.00 . See the Costs component dialog:

Supplement ingredients ($/tonne)

Ingredient name	Cost ($/t)
Maize	50.78
Wheat, whole	42.50
Triticale, whole	44.60
Wheat straw	0.00
Wheat, crushed	0.00

2. Ensure you have some production feeding components in the Farm System.





Here are the details of the Production feeding rules in the example:

Production Feeding rule: Simulated wheat stubble - 1

Feeding rule	*Ad libitum*, in Feedlot from 15 Dec to 14 Jan Start feeding when available green DM < 9000 kg/ha End feeding when available green DM > 5000 kg/ha

Supplement: Wheat straw/Wheat, crushed

Ingredient	Wheat straw	Wheat, crushed	Overall mix
Proportion of mix (%)	30	70	100
Dry matter content (%)	87	89	88
Dry matter digestibility (%)	39	90	75
ME:DM (MJ/kg)	5.3	13.8	11.3
Crude protein (%)	2	13	10
Rumen-degradable protein (%)	30	91	88

Production Feeding rule: Simulated wheat stubble - 2

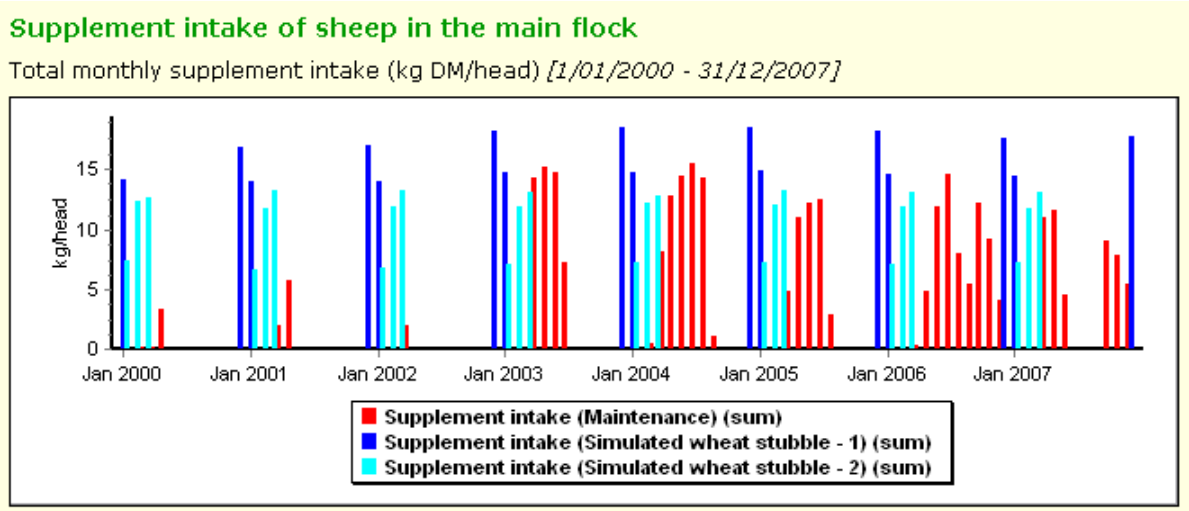
Feeding rule	*Ad libitum*, in Feedlot from 15 Jan to 30 Mar Start feeding when available green DM < 5000 kg/ha End feeding when available green DM > 5000 kg/ha

Supplement: Wheat straw/Wheat, crushed

Ingredient	Wheat straw	Wheat, crushed	Overall mix
Proportion of mix (%)	80	20	100
Dry matter content (%)	87	89	87
Dry matter digestibility (%)	39	89	49
ME:DM (MJ/kg)	5.3	13.7	7.0
Crude protein (%)	2	13	4
Rumen-degradable protein (%)	31	92	70

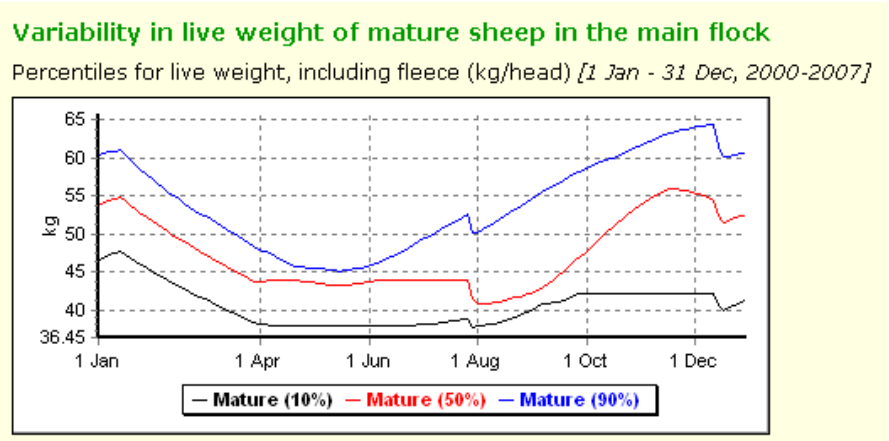
3. Test the Farm System.

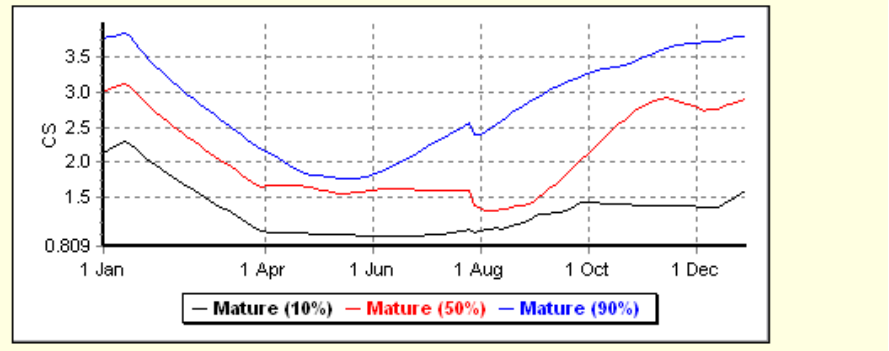
The supplement being fed can be seen in this chart:

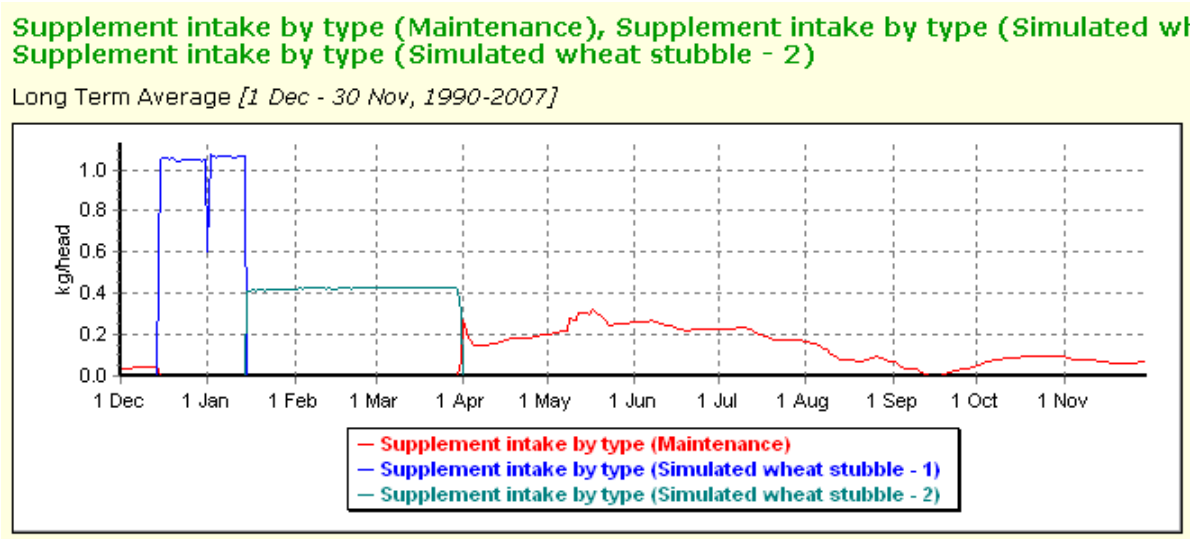


The only supplement that affects the gross margin as a cost is the maintenance supplement.

The long term animal condition is shown in these percentile charts:







Actual supplement intake

Above is shown the long term average of supplement intake for each supplement type. The first period of stubble feeding is assuming that the animals get better quality feed with more grain than the second period.