



0.0.0.0

## 1 Sensibility

This sensibility test explores dual-purpose wheat in a high rainfall livestock system in south-eastern Australia.

It is based on:

*Sprague SJ, Kirkegaard JA, Dove H, Graham JM, McDonald SE, Kelman WM (2015) **Integrating dual-purpose wheat and canola into high-rainfall livestock systems in south-eastern Australia. 1. Crop forage and grain yield.** Crop and Pasture Science 66(4), 365-376.*

*Sheep grazing wheat and fed in feedlot*

In this example simulation sheep are bought and sold on specified date. They are fed supplement in a feedlot at a set rate, but graze a wheat crop when crop biomass  $\geq 2.4$  t/ha. Sheep are moved from the wheat crop and back to feedlot when crop biomass reaches 0.5 t/ha or crop zadok = 31.

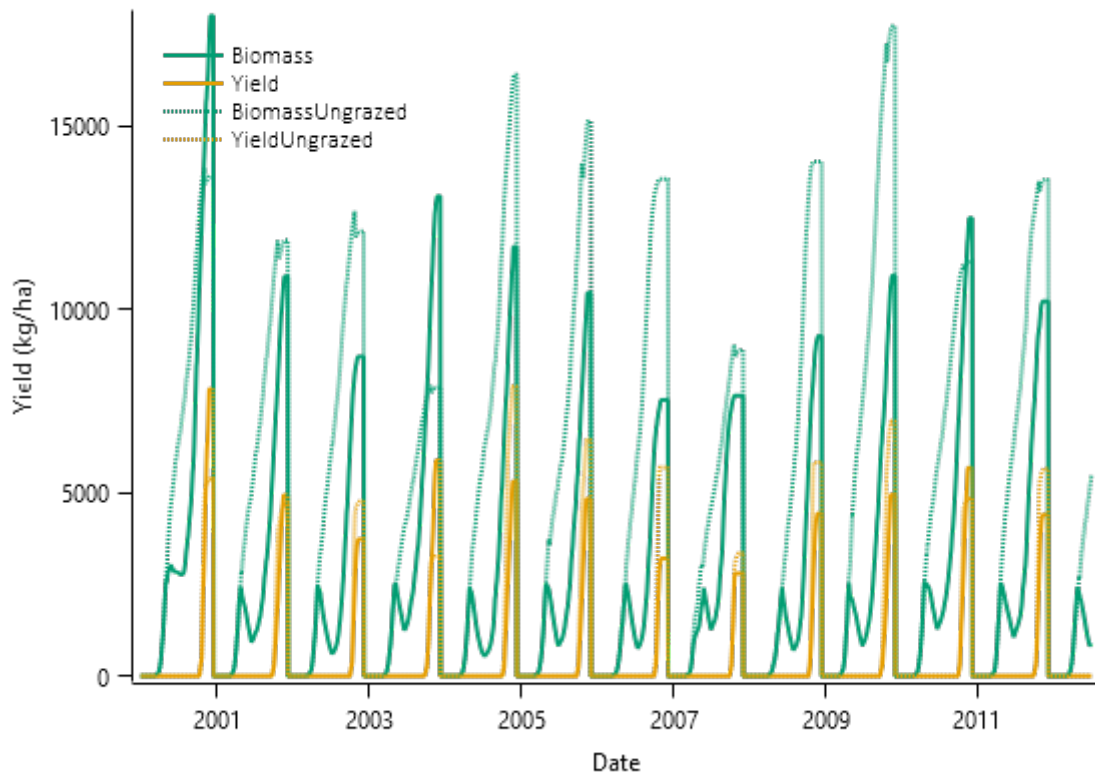
*Activities in this manager:*

1. Buy animals at start of year & put in feedlot
2. Move animals from feedlot to crop when ready to graze
3. Move animals from crop to feedlot
4. Shear all animals on specified date
5. Sell all animals at end of year

### NOTES

1. When the animals are in the feedlot and an animal dies during the day, the supplement has already been fed into the feedlot based on the number of animals in the feedlot at the start of the day. This means the remaining animals have access to slightly more supplement and causes a spike in supp intake graph.
2. When sheep are culled for age + purchased to maintain stocking rate, several groups of sheep are created. This causes irregular amounts of supplement to be fed.

# Wheat biomass



This graph shows the impact of grazing on the wheat crop.