WHEAT: PASTURE PLUS GRAIN

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(Poster title: Variation among spring wheats in winter feed production: an apparent association between growth and floral development)

1. Our work is aimed at diversifying production in the high-rainfall zone of Australia, i.e. the region east and south of the current wheat belt. Wheat cropping is a ready way of doing this: as well as producing a cash crop it may provide a valuable source of winter grazing when feed is in short supply; it also will allow lime to be incorporated economically into acid soils.

2. True winter wheats sown in February or March (if the opportunity occurs) may be grazed in winter without undue prejudice to grain yield. This is because the growing point, which ultimately becomes the ear, remains below ground level and therefore protected from grazing or frosts longer than in the case of spring wheats.

3. The greatest benefit, in terms of returns from grazing and grain, seems likely to result from grazing in mid-winter. The feed supply is then maximal if the crops have been allowed to grow undisturbed at about 30 kg/ha/day from early autumn (as opposed to only 1 kg/ha/day froma May sowing - see poster).

4. The grazing yield may be increased by about 25% by including a very early flowering spring wheat in a mixture with a winter wheat - see poster (we use 25% spring wheat). This is because spring wheats initially grow faster, but since they produce ears which will be destroyed by grazing they will not recover from grazing. This practice should have but a small effect on grain yield, because the winter wheat will produce shoots to fill the space previously occupied by the spring wheat. Although more winter feed results, the stemmy nature of the spring wheat will lower quality, and may be less suitable for some animals than winter wheat alone.