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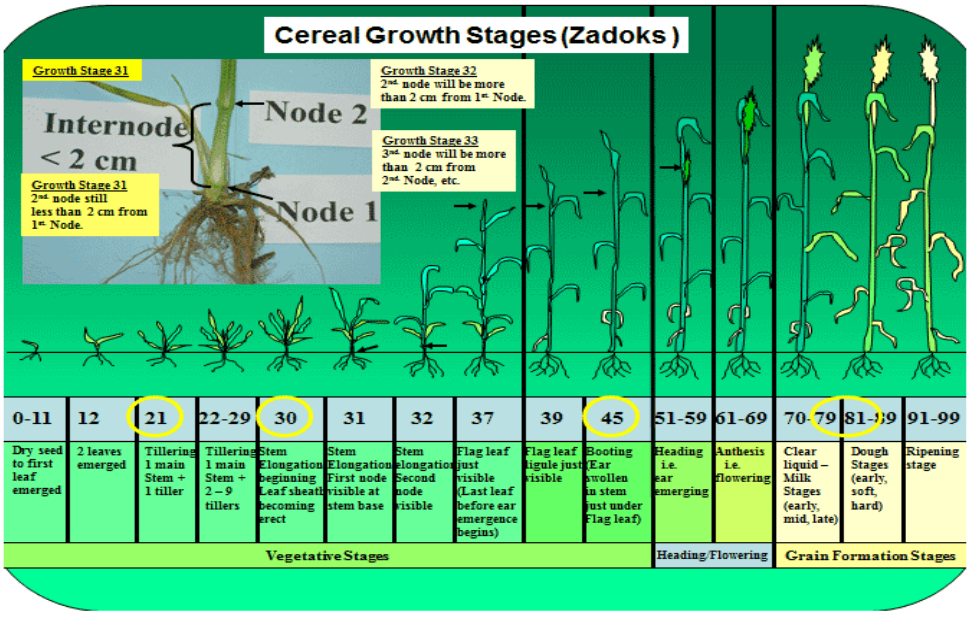
Grazing winter cereal crops

Forage or winter cereal crops can provide valuable livestock feed during winter when pasture growth rates are slow, leading to an increase in the overall yearly pasture production. Grazing can also reduce the risk of frost damage of early sown varieties by delaying the onset of ear emergence. The key is not to graze the crop too early. Wait until the root system is strong enough that the plant won't be pulled up from the ground. This is usually ~ 6 weeks following emergence (depending on variety) at the 3 leaf stage when the crop is beginning to tiller.

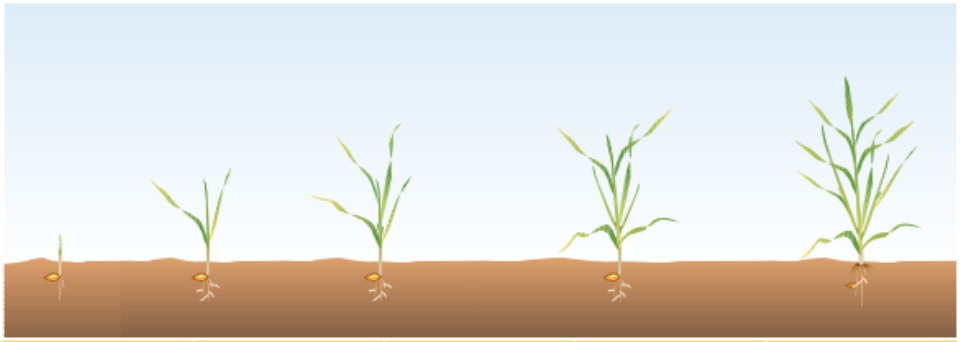
It is also detrimental to graze the crop after stem elongation (growth stage (GS) 30 for sheep and GS 32 for cattle) because at this time the developing head of each tiller (located above last developed node) is just above ground level. This is less important if grazing cattle, however, sheep will eat the plants lower to the ground and will pose an increased risk of damaging the node. Expect yield reductions if grazing plants at this stage as removing the head (and flag leaf) by grazing can reduce grain fill by up to 30%.

All cereals can be grazed but where a grain harvest following grazing is required, specific dual-purpose varieties should be selected. Varieties exhibiting a winter growth habit don't begin head development until they have undergone a vernalisation response (exposure to a period of cold weather), and because vegetative growth can be slow, grazing these crops early should be considered with caution. In contrast, varieties that do not have a winter growth habit (i.e late maturing varieties) can begin head development in autumn and early winter and so should be grazed harder earlier to slow growth and head emergence for later in the growing season.



Source: http://www.depi.vic.gov.au/agriculture-and-food/dairy/pastures-management/forage-cereals/grazing-cereals-when-and-how-to-graze-cereals-on-dairy-farms

Rotational grazing or crash grazing has the advantage of achieving an even grazing height across the paddock leading to even maturity at harvest as well as minimising wastage from trampling and allowing the control of animal intake. However, continuous grazing delivers higher animal production figures as the animals will exercise their preference and graze the areas they want. This can cause un-even grazing and result in a crop that can flower and boot at different times. Care should be taken to remove animals so as not to remove excessive leaf otherwise regrowth and tillering can be compromised.



Zadoks Growth Stage	GS 00 - 09	GS10 - 19	GS20 - 29	GS30 - 39	GS40 - 49
Development phase	Germination	Seedling growth	Tillering	Stem elongation	Booting

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Zadoks Growth Stage	GS 50 - 59	GS60 - 69	GS70 - 79	GS80 - 89	GS90 - 99
Development phase	Ear emergence	Flowering	Milk Development (grain fill period)	Dough Development (grain fill period)	Ripening

Source: http://www.grdc.com.au/uploads/documents/GRDC%20Cereal%20Growth%20Stages%20Guide1.pdf

Cereal crops are low in Calcium and fibre during vegetative growth, so precautions during grazing are required. AT the very least, roughage should be provided to livestock; usually in 4-5 different locations across the paddock to ensure the animals will consume it. There are also other means of ensuring livestock production is maximised.

Talk to Dynamic AG about grazing cereal crops during vegetative growth and the animal health precautions to consider. Phone (03) 5571 1760 for more information.