

Winter feed considerations

Animal Production

Animal production

When winter pasture growth falls short of what is needed to keep animals well-fed, feed must be transferred from times when supply exceeds animal demand. This process entails considering many factors at all levels of the farm business, from day to day management to the overall farm system.

Crop type

Swedes, kale, fodder beet, rape and turnips are commonly used to supply high volumes of winter feed when animal demand exceeds pasture supply. All these crops have pros and cons which are covered in other sections of this resource.

Deciding which crop to sow is based on several factors including the local environment; reliability of summer moisture (either natural or via irrigation); aims of the winter feed; prevalence of snow, and targeted animal performance, to name a few.

On-farm, or off-farm?

With increasing regulations around wintering stock on crops, you may prefer to move stock to land better suited to winter crops than the home farm. For example, this might mean soils that are less prone to pugging, with less potential for sediment runoff, and paddocks with more shelter than can be provided on-farm. Such a decision may provide financial, animal health, soil quality and environmental benefits.

There are biosecurity risks with moving stock between farms (e.g. *Mycoplasma bovis*) and some farmers maintain closed systems to avoid this.

All grass?

This choice is strongly influenced by local winter pasture growth rates. If there is little winter growth, supplements and sacrifice paddocks must be used to ensure two things – enough feed to achieve desired animal performance through winter, and adequate

pasture and other feed to meet the demands of lambing and/or calving.

All grass wintering is an ideal way of limiting mud, sediment run-off and the issue of bare paddocks after grazing a winter crop (prior to establishment of the following crop or new pasture).
There are two issues, however:

1. Available yield: limited to approximately 3.5 t DM/ha maximum before perennial pasture gets too long, and starts rotting underneath (maximum 4.5 t DM/ha for annual ryegrass). Overlong grass limits utilisation, feed quality and regrowth. So compared to 12 t DM/ha for kale, for example, all-grass wintering requires about 3 times the grazing area.

2. Early spring covers: will be much lower at calving/lambing, because such a large portion of the farm has been grazed in winter.

The consequence of these two issues is typically a less profitable system because it necessitates lower stocking rates (with less potential income); more supplement made and fed (increasing cost), and greater restrictions either side of winter (e.g. calving/lambing later, or drying off/selling lambs earlier).

Paddock selection

Information on paddock selection is in both the Fodder Beet and Brassica Management sections.

Animal monitoring

Ensure all animals are healthy, with access to water; a full, balanced diet; shelter, and appropriate dry areas for lying.

Catch-crops

After grazing winter feed, another crop such as cereals with or without ryegrass can be sown to soak up nutrients before they are lost and also reduce the risk of sediment run-off. This is known as a catch-crop.

Adding catch-crops to the rotation may mean slight changes to the farm system to maximise their financial and environmental value. They replace what historically would be bare paddocks and the feed they grow will need to be utilised either via grazing or machine harvesting.

Transition requirements

When changing from one diet to another, all ruminants require transition time to ensure they can properly digest and utilise the new feed without becoming sick.



Adverse events

These are periods of unusually high rainfall, snowfall, wind and/or extreme cold that fall outside what is considered 'normal' for your local area. Animals need to be more carefully looked after in these events, with extra shelter, water and feed, because their maintenance requirements increase in such conditions.

Designated 'adverse events' paddocks may be necessary, where animals can either graze feed growing in situ or can be fed supplements.

Wintering plan

A specific wintering plan is now required for all winter crops, including an animal wellness plan. Check your local regulations for required details.

Staff wellness

Winter can be a tough time of year. Looking after farm staff is essential for the sake of their health and productivity – both physical and mental. Sharing details, objectives and expectations of the wintering plan will help ensure understanding and buy-in.

Communication

Where two or more people involved in crop decisions, it's important all parties understand what the desired outcome is, and what expectations need to be met.

On-off grazing

This is a very effective tool to reduce pugging damage and animal health issues caused by wet weather. In normal winter conditions, cows will eat their daily intake allowance in 6-8 hours so once that is achieved they can be removed to a better area.

Having suitable areas to stand stock off into is important – these can include races, sacrifice paddocks, and yards (ensure that they are stone-free to minimise lameness). Always check local council regulations that apply to stand-off areas.

Break sizes

This decision may vary depending on the weather, and animal performance goals over the winter feeding period. Larger break sizes (2-3 days) will reduce pugging risk, but generally reduce crop utilisation (particularly with cattle) because of preferential grazing.

Larger breaks are also an option during adverse weather events to reduce pugging.