Feeding weanlings and store cattle in winter
by Siobhan Kavanagh

Introduction
Exploiting subsequent compensatory growth is a key goal when feeding weanling/store cattle in winter.

1. How do I feed weanlings during winter?
2. What are the feed needs of store cattle during winter?
Feeding weanling and store cattle in winter

1. How do I feed weanlings during winter?
   - To minimise feed costs and exploit compensatory growth at pasture during the following grazing season, aim for a moderate rate of live weight gain (0.5-0.6 kg daily) during the first winter. There may be a case for higher weight gains and higher supplementation rates (than those outlined below), if animals are being sold out of the sheds at the end of the winter, instead of returning to pasture. Animals growing too slowly during winter will not be able to compensate sufficiently at pasture.
   - Concentrate supplementation rate will be dictated by grass silage quality and animal type. Less concentrates are required when high digestibility silage is available.

   Concentrate supplementation levels (kg/day) for weanlings offered grass silage differing in dry matter digestibility (DMD)

<table>
<thead>
<tr>
<th>Poor (62% DMD)</th>
<th>Average (68% DMD)</th>
<th>High (72% DMD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental steers / bulls</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Continental heifers</td>
<td>2.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Friesian steers</td>
<td>2.6</td>
<td>1.7</td>
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</tbody>
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   - Meals should be front-loaded (i.e. feed more concentrates at the beginning of the winter than at the end of the winter) and reduced towards the end of the winter. The extra meal allows the animals to adjust to moderate quality silage for example, continental steers need 2.0 kg per day on 68 DMD silage or 300 kg meals over a 150 day winter. This could be fed as 2.5 kg for the first 100 days and 1.0 kg for the next 50 days.
   - The concentrate should be high in energy (UFL = 0.94+) and contain 14-16% crude protein on a fresh weight basis. Minerals / vitamins should be included in this mix.
   - If feeding fodder beet to weanlings, limit feeding rate to 5-10 kg fresh weight and feed 0.2-0.4 kg soya bean meal to balance it for protein. A mineral suitable for feeding with fodder beet (i.e. a maize/beet mineral) should be offered.

2. What are the feed needs of store cattle during winter?
   Store cattle are animals that are being housed for a second winter, with the intention of going back to grass again the following spring.

   How to Feed Store Cattle over the winter
   - The response to concentrate supplementation for stores is lower than for weanlings and subsequent compensatory growth at pasture is generally greater.
   - Target daily live weight gain during the housing period is 0.5 kg/day for heifers and 0.7 kg/day for steers.
   - The optimum level of concentrate supplementation for store cattle in winter is in the range of none to 2.0 kg / day, depending on silage quality. For good quality silage (72 DMD or greater) feed no meals. For moderate to poor quality silage feed 1.0-2.0 kg concentrates / day.
   - Crude protein concentration of rations for store cattle should be 14-16%.
   - Mineral requirement is similar to weanling cattle (see above). Use a general-purpose cattle mineral unless alternative forages and feeds such as maize silage, whole-crop cereal silage or fodder beet are being used.

   Key terms
   Compensatory growth
   Compensatory growth usually occurs when animals have a plentiful supply of high-quality feed (usually grass) available following a period of restricted growth. Compensatory growth allows animals that received a limited diet over winter to ‘catch up’ with animals who were on a higher plane of nutrition (e.g. higher levels of concentrates) over winter.