The cost to feed ewes on the run up to lambing can be reduced by grazing in lamb ewes on fodder crops and brassicas. These alternative forage crops can be fed to ewes when there is insufficient grass on the farm throughout the winter period and offer high yields of high quality forage. This can reduce the requirement to off-winter ewes, reduce supplementation use, aid animal performance and ease grazing pressure on grass crops, aiding early spring growth.

Feeding Alternative Forage

In lamb ewes can be turned on to alternative forages from mid December – mid January for 6-8 weeks. Ewes should be introduced to the change of nutrition gradually to prevent disruption to the digestive system. Ewes should be initially offered only one hour grazing time on a full stomach to limit intake. Grazing times can then be increased daily.

Grass run back should be offered to the ewes to ensure a dry resting area is provided. This will help prevent the ewes from becoming too dirty. Fibrous roughage should be offered on an *ad lib* basis to promote rumen health. This can be in the form of silage or hay and should make up 30% of the diet. Many brassica crops are high in dry matter and some sheep may lose teeth when grazing the crop. The condition score of the sheep must be monitored to ensure they do not lose condition during the grazing period, which may be associated with loosing teeth. Availability of silage for the flock will be beneficial to animals who may have lost teeth, whilst adding protein and fibre to the diet.

Our Practical Guides cover five useful topics:

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2. Renewable energy
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This practical guide looks at reducing ewe feed costs while aiding rotational benefits and animal performance.

Detailed information regarding feed allocation of alternative forages can be found in Technical Note TN694 (Alternative Forages for Sheep: Fodder Beet).
Feeding Alternative Forage Crops ...

Ideally alternative forages should be strip grazed, with a long and narrow feed face. The leaves of root crops are high in protein, while roots are high in energy, by strip grazing, the ewes utilise the crop with minimal wastage and have a more nutritionally balanced diet. Bales of silage can be put in the field amongst the crop, before feeding begins. This prevents damage to the soil from heavy machinery during winter. These can be spaced out to be offered with every move of the electric fence. A light feed ring can be used around them when being fed to prevent wastage.

Many alternative forage crops have low levels of trace elements, therefore it is essential to provide free access minerals or bolus the ewes. Ewes can be supplemented whilst grazing forage pre lambing if required. Offering *ad lib* silage and concentrate feeding while on a forage crop, ensures a smooth transition of diet when they are either housed for lambing or lambing outdoors on grass. Be cautious of winter weather e.g. snow or frost, when it may be difficult for the ewes to forage on root crops, by ensuring an adequate supply of alternative forage is offered.

Root crops such as swedes and fodder beet can lose their tops due to frosty conditions, these tops are high in protein compared to the root which is high in energy. This may leave the ration deficient in protein, resulting in ewes using their own body reserves and they may lamb with low protein reserves. To prevent this, tailor rations with a good quality protein source.

### Characteristics of Alternative Forage Crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Sown</th>
<th>Utilised (post sowing)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stubble Turnips</td>
<td>May-Sept</td>
<td>8-13 weeks</td>
<td>Can grow as a catch crop (summer &amp; autumn)</td>
</tr>
<tr>
<td>Kale</td>
<td>April-May</td>
<td>22-30 weeks</td>
<td>Cold tolerant</td>
</tr>
<tr>
<td>Forage Rape</td>
<td>May-August</td>
<td>10-12 weeks</td>
<td>Quick Growing, not cold tolerant</td>
</tr>
<tr>
<td>Swedes</td>
<td>April-June</td>
<td>Autumn/late winter</td>
<td>High dry matter (more cold tolerant than turnip)</td>
</tr>
<tr>
<td>Turnip</td>
<td>April-June</td>
<td>Autumn/early winter</td>
<td>Low dry matter (less cold tolerant than swedes)</td>
</tr>
<tr>
<td>Fodder Beet</td>
<td>Late March – Late April</td>
<td>25-30 weeks</td>
<td>Very high yielding</td>
</tr>
<tr>
<td>Hybrid Brassica</td>
<td>April-August</td>
<td>10-12 weeks</td>
<td>Summer, autumn and winter grazing</td>
</tr>
</tbody>
</table>

### Key Points

- Choose fields with free draining soils and no steep slopes to minimise the risk of poaching and run off.
- Ensure the field offers shelter for the grazing stock.
- Ensure water is supplied to minimise poaching around watercourses.
- Apply fertiliser and lime according to soil test results.
- Position bales in the field throughout the summer to prevent travelling of heavy machinery throughout the winter which could cause soil compaction problems.