



Animal &  
Plant Health  
Agency

## Information Note

# Winter 2018: Potential forage shortages in the UK Potential livestock health & production problems

### Autumn/winter 2018/19

Below average temperatures in early spring meant a delayed start to the grass and arable crop growing season, followed by prolonged periods of hot, dry weather across large parts of the UK. Reports from a number of sources have indicated that there is likely to be a shortage of forage on farms for this winter in some parts of Northern Ireland and England and Wales, and possibly in parts of Scotland. Early forage crops were of good quality, but low quantity and later crops of very low quantity. Later forage crops will of course depend on future climatic conditions. Combined with poor grass growth due to the hot dry weather, grazing has been limited leading to the early use of forage that was originally conserved for winter use. In addition, the cold spring led to a slow start for cereals; reports of lower yields have been received. This could impact on the amount of cereals available for concentrate feeds for animals, although the proportion available for human consumption, which depends on its quality, means that the amount available for animals is less easy to predict.

The potential for health, welfare and production problems in ruminants varies depending on the type and stage of production, and may be associated with feeding insufficient quantities of forage of reasonable quality. There is also a greater risk of infectious disease and lower resistance to parasites for animals on a lower plane of nutrition and an increased risk of diseases associated with feeding soil-contaminated forage.

### Dairy cows

- Lower milk yields.
- Increased subclinical or clinical ketosis.
- Reduced fertility.
- Digestion problems.
- Mineral and energy deficiencies.

- Changing risk and lower tolerance to endoparasites e.g. liver fluke.

To compensate for the lower quantity forage and to try to maintain the animals' performance, increased concentrate feeding may be employed, although this can increase the risk of metabolic disease, in particular ruminal acidosis and laminitis. Feed changes should be made gradually.

## **Suckler cows and Sheep**

- While the metabolic requirements of suckler cows and sheep are lower than dairy cows, feeding insufficient forage can affect fertility, particularly in achieving a good flush during the mating period. This also depends on the climatic conditions leading up to this period.
- Straw-based diets have been associated with rumen impaction in suckler cows.
- Later in pregnancy ewes will have a higher risk of energy deficit leading to 'twin lamb disease' and hypocalcaemia if they are not adequately fed or supplemented.
- Lower birth weights of calves and lambs from cows or ewes which are under-fed.
- Production of colostrum may be affected, which in turn can affect the defence of the newborn to disease threats. Poorer milk yields occur in animals on a lower plane of nutrition and agalactia (complete lack of milk) can occur in ewes.
- Growing animals will fail to attain optimal weight gain if fed insufficient forage.
- The feeding of soil-contaminated forage can contribute to digestive and metabolic disorders and risks for example diseases such as listeriosis, *Bacillus licheniformis* and fungal infections.

## **Bedding**

In addition to insufficient silage, there may be shortages of straw bedding. Where straw is in short supply prices are likely to rise and other species may be affected if there is shortage of good quality bedding, including pigs and horses. These factors could force some farmers to cut back the amount of straw used for bedding on farms. A reduced amount of bedding increases the amount of faecal contamination of housed animals. This will raise the risk of diseases such as mastitis, especially in dairy cows, and alimentary disease resulting in diarrhoea in all ages of livestock, but the highest risk will be in neonatal and young animals. An increased risk of opportunist infection of the reproductive tract in animals giving birth is also associated with dirty bedding. Reduced bedding can also adversely affect the management of respiratory disease. Using less bedding will result in dirtier animals which can affect their suitability for presentation at abattoirs.

Farmers may seek alternatives types of bedding such as waste paper, or recycled wood shavings, but these can also be associated with difficulties, and present different

management challenges. Increased use of rape straw is being reported; farmers should be aware of the risks of using this material especially if it has been treated with Astrokerb, which could have an effect on susceptible arable crops if dung from animals bedded on treated rape straw is spread onto land used for susceptible crops, see <https://www.nfuonline.com/cross-sector/science-and-technology/crop-protection/crop-protection/rape-straw-cannot-be-used-for-animal-bedding-if-it-has-been-treated-with-astrokerb/>

There may also be issues associated with poaching of fields following further rain onto already sodden ground, especially around livestock feeding areas, and the increased risk of foot and skin problems as well as increasing potential reservoirs of infection, for example if salmonella is present. Veterinary advice should therefore be sought.

Veterinary surgeons need to be aware of these risks so they can best advise their farmer clients through health planning. Advice may need to be sought from the livestock industry levy boards and specific advice on feed and nutrition from specialists. Charities may need to be approached if farmers find themselves facing hardship.

## Useful links and further information

The Northern Ireland Department of Agriculture Environment and Rural Affairs (DAERA) has useful information and advice for farmers in relation to fodder management, including storage, and on dealing with winter feeding of livestock on beef and sheep farms with limited fodder supplies on beef and sheep farms:  
<https://www.daera-ni.gov.uk/articles/fodder>

AHDB Beef and Lamb publications on nutrition and forage:  
<http://beefandlamb.ahdb.org.uk/returns/nutrition-and-forage/>

AHDB Dairy Forage for Knowledge articles:  
<https://dairy.ahdb.org.uk/technical-information/grassland-management/forage-for-knowledge/>

APHA Straw bedding shortage information note 2018:  
<http://apha.defra.gov.uk/documents/surveillance/diseases/bedding-shortage-info-jan18.pdf>

Alternatives to straw bedding for pigs:  
[http://pork.ahdb.org.uk/media/2099/15\\_Bedding-options-for-the-English-pig-industry.pdf](http://pork.ahdb.org.uk/media/2099/15_Bedding-options-for-the-English-pig-industry.pdf)

Additional information is available through Farming Connect publications on alternative bedding materials and preparing a winter feed budget. In addition, Farming Connect have locally based teams of development officers throughout Wales (**Wales only service**) who are also on hand to provide advice and guidance.

Web: <http://www.gov.wales/farmingconnect>

Phone: Service Centre – 08456 000 813

Email: [farmingconnect@menterabusnes.co.uk](mailto:farmingconnect@menterabusnes.co.uk)

Information about the APHA, SRUC-VS and AFBI veterinary laboratory networks in the UK:

- APHA in England & Wales:  
<http://ahvla.defra.gov.uk/vet-gateway/surveillance/diagnostic/index.htm>
- SRUC-VS in Scotland:  
[https://www.sruc.ac.uk/info/120144/farm\\_animal\\_diagnostics](https://www.sruc.ac.uk/info/120144/farm_animal_diagnostics)
- AFBI in Northern Ireland:  
<https://www.afbini.gov.uk/articles/animal-disease-diagnostic-services>



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<http://apha.defra.gov.uk/vet-gateway/surveillance/index.htm>

The Animal and Plant Health Agency (APHA) is an executive agency of the Department for Environment, Food & Rural Affairs, and also works on behalf of the Scottish Government and Welsh Government.