

Taking back control



Ian Cairns from SAC explains what can be done to manage the increased rush infestation witnessed on many upland pastures in recent years - both inside and outside of agri-environment scheme control.

Common Rush infestation is mainly a problem in permanent pastures and rough grazings. These plants are particularly associated with poorly drained soils and are common in marginal and reclaimed upland areas with high rainfall.

Rush infestations can arise and spread in pastures, reducing the grazing quality and productivity of swards.

Once established, rush plants can also reduce the effectiveness of soil drainage and, where silage is made, can affect consolidation and reduce fermentation quality. Recent wet winters and summers have provided ideal growing conditions and limited the opportunity to control infestations.

Common rush seeds can lie dormant in soils for up to 60 years and a single rush seed head can produce up to 8,500 seeds per annum, which are easily dispersed in the wind. It is therefore very important to take action quickly to prevent rapid infestation.

Costly and unproductive

A 15% rush infestation of a productive grass sward, could reduce output by 1.25tDM/ha/annum. If the field is cut for big bale silage on upland in-bye fields, the value of lost production could be as high as £192/ha.

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Ian Cairns,
SAC



Preventing Infestation

DO

>> **DRAIN:** Maintain good drainage and remove soil compaction on the surface or within the soil profile.

>> **LIME:** Maintain soil fertility and soil pH to encourage good grass growth.

>> **RESEED:** Use persistent and aggressively tillering grass seed mixtures to aid quick establishment and provide competition to rush seedlings.

DON'T

>> **OVERGRAZE:** Avoid damaging grass swards by overgrazing, thus poaching and creating bare patches where rush seeds can establish.

Control Measures

Ploughing, drainage and reseedling offers the best long term solution.

- **Deep ploughing**

This helps to bury rush seeds beyond germination depth and creates a clean soil seedbed for grass establishment. The resulting, well established, competitive grass sward which is well managed will prevent new rush infestation. In more dense infestations, wiping in two directions may be required to achieve effective control.



Ploughing and reseedling

- **Topping with a rotary or flail mower before the rush plants seed**

This can help to slow the rate of spread of infestations and can be useful in encouraging leafy growth before chemical treatment. However, topping severe infestations can create a thick mulch of dead rush plants and is unlikely to achieve control without further action.



Topping is only part of the solution

- **Good grazing management**

This is key to prolonging the life of grass swards and preventing weed infestation. The aim is to avoid excessive winter grazing, but to graze hard (and top if necessary) in the summer. This strategy may be at odds with agri-environment scheme rules. Less selective grazing animals, such as cattle, will help to prevent re-infestation due to their grazing and trampling effect on young rush plants.



Leafy regrowth suitable for wiping

- **Chemical control**

This can be effective in widely scattered and light infestations, using glyphosate applied through a wiper, where rush plants are actively growing and stand higher than the surrounding grass (for example after removing grazing cattle or sheep).

Common rush is also susceptible to selective hormonal herbicides, such as MCPA, but these must be applied with care as they will damage or kill most broad leaved plants, including clover. Advice should be sought from a BASIS qualified adviser before application and must be applied according to the product data sheet.



Chemical control options will not be possible where rush pastures are managed under environmental schemes or under organic management.

Future Farmer-led events...

This technical article supports the on-farm rush management events that were held as part of the RDPE Northwest Livestock Programme's demo events 2009-2013.

Originally organised by Myerscough College and Cumbria Farmer Network, similar events have since been replicated by EBLEX and SAC elsewhere in England using similar funding.

This work was very much farmer-led, brought about by farmers with a need for knowledge on this subject asking for practical information and options to address rushes on wet land.

Myerscough College (through Lancashire and Greater Manchester Farmer Network membership) and Cumbria Farmer Network are still looking to address the knowledge needs of farmers in this way, so if you are looking for further support on this topic, or would like to see if future events could be organised local to you, please reference this article when using the contact details below:

Email: farmnw@myerscough.ac.uk
Tel: 01995 642 206

Rushes and Wildlife Habitat

Wet pastures with some rush cover, can provide good habitat for wading birds such as curlew, redshank, lapwing and snipe. Fields with over one third rush cover need to be **managed by topping**, to achieve the right balance between open space and cover to suit specific bird species.

If these pastures are entered into an Entry Level Scheme (ELS) or Upland Entry Level Scheme (UELS), points can be scored for managing fields in line with the relevant management option. There can be a conflict between management criteria of rush pastures to meet ELS or UELS scheme rules and the practical and effective control of rush plants, so fields managed under these scheme options should be carefully chosen.