Managing rushes – containment or suppression?

The aim of this information note is to promote an approach to the challenge of tackling rushes with pesticides that is based on the concepts of containment or suppression.

For too long farmers have employed strategies to control rushes which are not appropriate to the scale and/or challenge of the rush incursion on their holdings, and for this reason have failed to achieve sustainable, cost-effective long-term solutions. Often there are only limited short term gains, before the sward reverts to its original state or regresses even further.

A key driver for initiating such inappropriate actions has been the perception that such land if not sprayed will incur a penalty to the applicants BPS.

THIS IS NOT THE CASE!

Provided there is evidence of agricultural activity/animals grazing, e.g. vegetation trampled, dung etc. such areas will not be subject to DAFM penalties in relation to rushes. However, if such ‘grassland/rough grazing’ were to become overgrown with scrub, gorse, brambles etc. because no management had been imposed, then penalties/reductions in payment could follow on inspection. The important thing here is that such areas are managed, rather than abandoned, i.e. that a sustainable management plan is in place.

Choosing an appropriate strategy to tackle rush infestations

The attached graphic describes two alternative approaches to addressing this problem. Suppression – identifies a manageable problem, that can with the appropriate interventions result in satisfactory control of rushes, increased long-term productivity and a financial return on the investment incurred. Containment on the other hand acknowledges that the level of rush infestation is such that, given the challenging location factors, and farm viability, any intervention by the landowner is unlikely to result in a lasting positive benefit. In this situation the best option is to practice ‘opportunistic management’ whereby the aim is to prevent the situation from getting worse and spreading to neighbouring land parcels.

Containment or suppression

The graphic indicates that the scale of the problem is determined by the interaction between location factors, farm and sward factors. The rush strategy to follow depends on where this equilibrium is reached.

Location is the dominant factor impacting both on farm and sward factors. Elevation, slope, aspect, rainfall, soil structure & drainage etc., all come under this heading, and except for...
drainage (very expensive), there is little the landowner can do to deal with the negative aspects of these factors. High levels of rainfall, poor or impeded drainage, and low pH all favour the proliferation of rushes. Another factor to consider is the environmental sensitivity of the site/land parcel, and how any implemented management strategy might negatively impact on the same, e.g. it is a high risk strategy to apply herbicides (especially those based on MCPA, 2,4-D etc.) at any time in close proximity to water courses, particularly if there is water present in field drains and ditches, and you cannot be sure of a dry window for uptake of the product used. Land falling within a drinking water catchment would also significantly increase the risk to the environment from using herbicides.

Farm factors include the type of farming practiced e.g. sheep, cattle etc. Is the system intensive or extensive, and how profitable is it? Participation in an agri-environmental scheme(s) may limit various potential control options, e.g. ability to use pesticides etc. Ultimately a cost/benefit analysis will determine if/how much money is available to invest in either a suppression or containment strategy.

Sward factors – in practice these are largely determined by the above factors, and whilst swards can be reseeded, this is an expensive strategy, and will not result in a permanent improvement in productivity unless other factors are also addressed, principally drainage and pH. Amending pH by applying lime is a relatively cheap, cost effective strategy to improve the growing environment for desirable grass species, but drainage is a very expensive option, which is likely to be only viable on the most efficiently run holdings.

The graphic is only a guide for the discussion that needs to take place for each site/land parcel. On the one holding, some fields may warrant following a ‘containment strategy’ whilst neighbouring fields might be better suited to the adoption of ‘suppression strategies’. Also consider that the equilibrium reached can be arrived at by a combination of various factors - a heavy infestation of rushes does not necessarily preclude adopting a suppression strategy, it depends on the other contributing factors.

Containment
Containment is about preventing the situation from getting any worse and stopping the further incursion of rushes into adjoining fields/land parcels. This strategy is best described as ‘opportunistic’ and is limited to actions such as allowing stock to graze/trample the vegetation when conditions allow. In some years this might only be possible for a few weeks in the year, in other years it may be possible to get machinery in to cut or mulch the rushes. If this is the strategy to follow, detail it in writing, so there is a recognised plan to follow. There is no justification for applying herbicides if practicing a containment strategy!

Suppression
Where it is concluded that suppression is the most appropriate strategy to pursue, several management options are available, but they all require long-term investment in time, money and resources. However, in contrast to containment, there is the real expectation that sward productivity will be enhanced in the long term, and that there will be a reasonable return on the financial investment. Implicit in this strategy is the recognition there may be a role for herbicides as part of an overall integrated management strategy for rush control. However, it is paramount that water quality is protected, and to this end, product label directions should be followed to the letter of the law.