# Field Lab Notes: Reseeding
# Managing Rushes without Chemicals

## *Reseeding cultivations*

The Managing Rushes without Chemicals Field Lab is running over several locations throughout Scotland to find out the best ways that rushes can be managed. It has the following aims:

- **Improve productivity** (carry more livestock and produce more silage or hay)
- **Invest in grassland for long-term production** (reduce the costs associated with reseeding and short-term weed control measures)
- **Improve wading bird habitat where appropriate** (improve biodiversity, and potentially provide an additional source of income as part of an agri-environmental scheme)

Our many field lab meetings, held at several sites throughout Scotland, have shown us that the essentials of rush management are the same as the essentials of good grassland management: drainage, soil structure, soil pH, and the soil nutrients phosphate and potash. Before reseeding it is important that these essentials are addressed, in order to improve the chances of success. If they are not addressed before reseeding, then your grass may end up worse than it was in the first place.

### Getting the seed mix right

Reseeding is carried out to improve productivity. Sowing an appropriate grass seed mix can improve the quality of grass and clover available, and they can compete with, and suppress weeds, i.e. rushes. Highly productive grass and clover species are great in very good conditions, but may be killed out in more marginal situations (i.e. areas prone to rushes). This would allow weeds such as rushes to establish, ultimately decreasing productivity.

If you are going to reseed then you should have a conversation with your seed merchant about the best grass seed mix for your situation. What do you want the mix for? Do you want it for silage; hay; productive grazing to be ploughed out in a few years; or grazing that will be down for decades? How good is the field? Does it drain well? The best seed mixture for you will depend on a lot of different things. Paying a bit extra for a bespoke mix will be worth it, if it increases the chance of success.

### How are you going to sow your reseed?

There are two main categories of reseeding: a direct reseed, and an oversow. Which one you choose will depend upon the current condition of your sward. If you still have good coverage of productive grasses then oversowing this to give it a boost may be enough to improve productivity. However if the rush infestation is severe, and the soil is deep enough, ploughing followed by a full reseed may be necessary.

#### 1. Direct reseed

If deep ploughing (30-35 cm) is possible, then a full reseed can give the best chance of getting rid of the rushes. Deep ploughing will bury rush seeds far enough down to stop them from germinating. If a ploughed reseed is not a success, then don't plough again next season: it will just bring back the previously buried seeds to the surface. This

can make the problem even worse than it was in the first place, so if you need to try again you should oversow. Most rush seeds are viable for around 3 years, but some can survive as long as 40 years, which is a long time!

## 2. Oversowing


If ploughing is not possible then oversowing is an option. Ploughing might not be possible because your soil is shallow, very stony, peaty, prone to compaction, or inaccessible. You may also wish to oversow if your sward is ok, but could do with a bit of improvement – an example would be oversowing some clover seed (bulked up with grass) to increase the clover content of the sward. Faster establishing grass varieties should be used in an oversow: they will compete more with the rushes.

There are several ways of oversowing, which can be categorised as drilling (direct drilling, slot seeding, tined harrow seeding), or broadcasting: Drilling methods such as slot seeding will work better in drier conditions, while broadcasting will work better in wetter conditions.

It is important that rolling is carried out (at walking pace) after sowing to increase soil-seed contact and help germination.

## Looking after your reseed

Don't forget to keep an eye on your reseed, and to keep managing the land it is on. Keep an eye on drainage, soil structure, pH, and nutrients. Clear out your drains, dig a hole to check for compaction, and regularly take soil samples for analysis. It is also important to make sure that any emerging young rush plants are topped or grazed, and are not allowed to set seed.

## Summary

Reseeding can be an important part of rush control, but should only be carried out after the essentials of drainage, soil structure, pH, and nutrients have been addressed. Otherwise the investment that you have made with your reseed will not pay off, and you could potentially end up with an even worse rush problem. A successful reseed will not only help with rush control, but will also introduce new grass species that will benefit your production.

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