# Field Lab Notes: Biodiversity
# Managing Rushes Without Chemicals

## *Grassland management for biodiversity*

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)

In order to successfully manage rushes the grassland management essentials of drainage, soil structure, pH, and soil nutrient status must be addressed. In some situations the cost of addressing these does not justify their potential production benefits. In these cases it is worth considering managing the grassland for biodiversity. There are also areas of grassland that are already biodiverse, where appropriate management is important to keep this value.

## Managing grassland for biodiversity

### Wader grazed grassland

Where drainage is difficult and/or costly, a boggy area could be managed as a habitat for wading bird species, as this is a good nesting site and source of food. Patchy swards, greater than 3 ha, that vary in height, and are not adjacent to trees or hedges are best for waders. Rushes are an important part of these swards, but should not be allowed to become too thick (and should not make up more than about a third of the area). During the breeding season livestock should be restricted or excluded, and mechanical operations should be avoided. Outwith the breeding season the sward should be well grazed. There is Scottish Government funding available to manage areas of wader grazed grassland through the AECS scheme.

### Species rich grassland

If a soil is reasonably well drained, has a low soil nutrient (i.e. phosphate and potash) status and/or a low pH, then it can be very expensive to improve, and the cost benefit may be marginal. In these situations it may be worth considering managing the area as a species rich grassland (if it already is species rich), or reseeding it with a species rich grassland mixture. Light grazing by livestock, or cutting for hay with aftermath grazing is a good way to manage species rich grassland. There is Scottish Government funding available to manage areas of species rich grassland through AECS.

## Conclusion

If some of the grassland management essentials are too costly to be addressed then managing grassland for biodiversity, and receiving funding for this through AECS, could be considered.