

## RUSHES!!











## Rushes



### Common or Soft Rush (*juncus effusus*)







## How infestations arise!



- 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 a year.





## Key factors causing rushes



- Low pH
- Poaching
- Too much winter kill, caused by excess Nitrogen application in autumn
- Too much slurry in winter
- No control of seed heads





### Why control?



- 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 (£78/acre)





### Aims of control

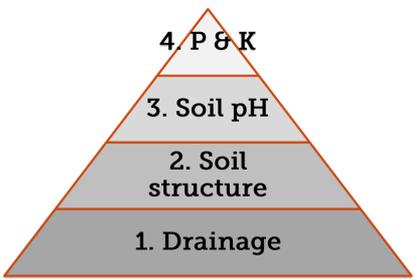


- **Improve productivity** (carry more livestock and achieve higher DM yields)
- **Invest in grassland management for long term production** (reduce the costs associated with reseedling and short-term weed control measures)
- **Improve wading bird habitat where appropriate** (improve biodiversity, and potentially provide an additional source of income as part of an agri-environment scheme).





### Grassland Essentials!




### Liming




- Rushes are tolerant of a wide pH range (soft rush 3-7)
- Maintain soil pH to encourage good grass growth





### Phosphate and Potash



- Soil sample to determine P and K status
- Must be at least moderate for productive grasses and clover to effectively compete.






### Cutting/topping




- Prevents rush plants from setting and spreading seed.
- Allows light into the sward
- Makes lime spreading and applying nutrients easier.





### Chemical control



- Best when rush plant is actively growing (May or June)
- Look out for ground nesting birds (snipe or lapwing)
- Main options
  - MCPA
  - Glyphosate





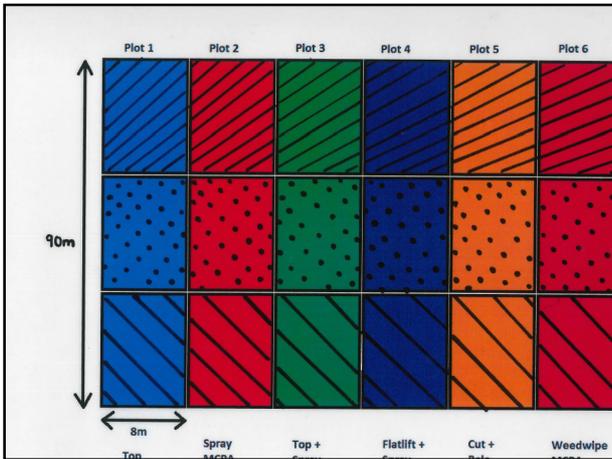

### Other considerations



- Deep ploughing (30-35cm)
- Oversowing
- Reseeding
  - Getting the grass seed mixture right
- Manage the ground for biodiversity







### Costs of control



- Topping £12/acre
- Spray MCPA £14/acre
- Subsoil & Spray £38/acre
- Cut & Bale £35/acre
- Weedwipe (no chemical) £10 -15/acre
  - Roundup (£7/litre) applied at 20:1
  - Lime 2t/acre £30-35/tonne
  - TSP 2cwt/acre (250kg/ha)

