

# Illustrated guide to purple moorgrass and rush pasture

**Purple moorgrass and rush pasture is found on poorly drained, usually acid soils receiving high rainfall. It includes species rich fen meadows and pastures. They often occur in a mosaic with other habitats such as wet heath, dry grassland and wet woodland. These grasslands support a range of highly specialised plants and animals that have adapted to the specific conditions of this grass.**

This guide illustrates what this type of grassland should and shouldn't look like at different times of the year. The number of flowers in this type of grassland can vary widely, from very few to dominating the sward.

The general requirements apply however many flowers there are, unless you are managing for a particular species with different requirements. Where possible use livestock to manage sward heights in preference to cutting.

## April and May



Indicator species include yellow iris and marsh marigold

In spring the grasses will be greening up. Nectar and pollen are scarce and any early flowers of plants such as willows, marsh-marigold and yellow iris are very valuable to insects.

Curlew lay their eggs in this type of grassland in April and May. They nest in open ground, often on a mound or tussock.

Shrubs and trees such as willow and bramble will provide valuable shelter, nesting sites and food for birds and insects.

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### Ideal in April and May



Ideal sward structure in April and May

Aim to create a diverse sward of shorter areas interspersed with taller tussocks.

Where purple moor-grass dominates the average sward height should be about 10 cm tall with no more than 25% of the sward taller than 15 cm.

Where rushes dominate, the average height should be about 13 cm with no more than 25% of the sward taller than 40 cm.



Cross section of ideal sward structure in the spring

### Ideal sward condition

- Tussocks of purple moorgrass and/or rush between ankle and knee-height scattered across damper places.
- Hoof marks and bare ground should be less than 10%.
- Small areas of localised poaching in and around very wet places.
- Areas of short sward between tussocks and drier places.
- Some dead plant material.
- Wetter areas which may occasionally contain yellow iris and marsh marigold.
- Areas of tussocks and areas of short grass.

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### Avoid in April and May



Too dense sward due to under-grazing



Sward too short due to over-grazing

### June and July



Indicator species in June and July include greater burnet and greater bird's-foot-trefoil

Flowers likely to be found on more species rich grassland at this time of year include greater burnet, greater bird's-foot-trefoil and lesser spearwort.

Curlew may still be incubating eggs in June and the young may not be ready to fly until late July or even into August. Marbled White butterflies will be on the wing.

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## Ideal in June and July



The sward height and structure should be same as that for April and May



Cross section of ideal sward structure in June and July

## Avoid in June and July



The sward too dense



The sward too short

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### September and October



Purple moorgrass indicator species in September and October

In September purple moor-grass and late flowering plants such as devil-bit's scabious and meadow thistle may still be in flower and there may also be a few angelica and sneezewort flowers in bloom.

Rushes will continue to grow and patches of scattered scrub and carr will provide valuable

shelter and food for birds and insects such as reed bunting and marsh fritillary butterfly.

Areas of dense litter can be beneficial to a wide range of over-wintering insects and small mammals. However, by October dense litter should be less than 25% of the surface area.

### Ideal in September and October



Ideal sward structure in the autumn

Where purple moor-grass dominates, the ideal average sward height is about 10 cm tall with no more than 25% of the sward taller than 15 cm, including rushes.

In rush dominated swards, aim for an average height of 7 cm with no more than a quarter of the sward being taller than 40 cm, including rushes.

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Cross section of ideal sward structure over winter

### Notes

- Areas of scrub and longer vegetation provide food and shelter for birds and invertebrates.
- Lightly poached scattered bare ground on up to 10% of the area can provide suitable conditions for plant colonisation next year.
- Dried plant material provides overwintering habitat for insects and small mammals.
- Maintain the diverse structure of the sward over winter.

### Avoid in September and October



This sward is too dense



This sward is too short

### Further information

Natural England Technical Information Notes are available to download from the Natural England website at [www.naturalengland.org.uk](http://www.naturalengland.org.uk).

For enquiries please contact the Natural England Helpline on 0300 060 0863 or email [enquiries@naturalengland.org.uk](mailto:enquiries@naturalengland.org.uk)

This guidance has been developed to support Environmental Stewardship agreements. It does not replace an agreement and you must continue to follow the prescriptions and specifications.

The outcomes shown may not be appropriate or suitable for all sites. Please consult scheme handbooks or your Natural England adviser for further information.

This note was originally published by RDS as illustrated guidance notes ESG029, ESG031 and ESG030. Illustrations by Jackie Hunt. Editor Susie Smith.

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