



The University Of Sheffield.

Rush Management Working for Waders

WADING BIRDS IN THE UPLANDS

Breeding populations of European waders are exhibiting widespread declines, especially in north-west Europe (BirdLife International, 2021). Two such species, the curlew and lapwing are now listed as globally 'Near Threatened' (IUCN, 2020) and are red listed in the UK (Birds of Conservation Concern 2021).

Conditions on the passage or wintering grounds can influence European wader populations, but low breeding success is typically the primary cause of the declines.

As the South West Peak is an important area for breeding waders, management at wader breeding habitats is crucial for stabilising and ultimately reversing population declines.

RUSH MANAGEMENT

One strategy to assist population recovery of these species is using agri-environment scheme (AES) options to improve vegetation structure - rush management being a primary example.

Rush management is an important tool in improving the foraging and breeding habitat for upland waders, and maintaining a suitable sward structure and composition is key.

However, different wader species have different requirements, and this should be considered at the site level and wider scale, rather than a one size fits all approach. Also, other important wildlife may be present, so measures should be considered alongside other interest and adjusted as needed.

Your farm advisor can help you identify what areas are important for wildlife. It is important to leave some rush entirely unmanaged across the farm for the benefit of other species e.g. reed bunting.

A holistic approach is also required, as rush management alone may not lead to an increase in breeding wader densities and breeding success. Predation control, stock management and wet feature provision (e.g. scrapes) are equally important, and the whole suite of measures need to be considered on a site-by-site basis.

If you are in an agri-environment scheme you must speak to the RPA before making any changes to the way your land is managed that does not fit within the terms of your agreement. If it is designated as a SSSI you must ask Natural England for consent for any operations.



Curlew

Ian Francis (rspb-images.com)



Lapwing

Graham Goodall (rspb-images.com)



Snipe

Andy Hay (rspb-images.com)

To provide suitable habitat and diversity at a farm scale, consider the layout of the farm and requirements of the different species. Knowledge of species currently present on your farm, and where they are breeding, would help to define field scale measures presented below.

WHAT YOU CAN DO FOR CURLEW ON YOUR FARM

- Maintain large open areas, with limited trees and/or shrubs and low cover in the form of tussocky rush and grass (up to 30cm high).

- Curlew require a mixed sward with scattered tussocks and patches of rush, as well as open areas of shorter vegetation (see fig. 1 – favourable rush habitat for curlew).

- Rush cover should not be allowed to get too dense or sparse, as the birds (especially young) need to be able to move through it freely, whilst still remaining concealed.

- In fields that are used by curlew ensure there is at least 30% rush cover in each field at all times. In a dry year move the rotation to cut the wetter areas that you may not normally cut, and leave the drier areas to provide structure and cover for the following year. When you cut make sure you remove arisings to minimise the rushes spreading.

- Ensure there are suitable feeding areas nearby (shallow scrapes that hold water semi-permanently, pools with muddy shallow margins) – curlew will travel some distance from their nests to find suitable feeding areas.

- Combining rush management with additional interventions to improve habitat quality may be beneficial, such as the creation of wetter depressions or flushes and blocking of drainage ditches.

- Spring operations should be undertaken before mid-March should conditions allow.



Fig. 1



WHAT YOU CAN DO FOR SNIPE ON YOUR FARM

- Snipe require a relatively short sward between 10-30cm high covering approximately 40% of the field. Retain taller (50-80cm high) scattered tussocks throughout the rest of the field (see fig. 2 – favourable rush habitat for snipe).

- Maintain large open areas, with limited trees and/or shrubs and low cover in the form of tussocky rush and grass.

- Rush cover should not be allowed to get too dense or sparse, as the birds (especially young) need to be able to move through it freely, whilst still remaining concealed.

- Some bare ground (up to 10%) from poaching is desirable, but remove stock in very wet weather to avoid large areas of puddled ground.

- You should not cut all of the rush at once (ideally 1/4 to 1/3), even in a dry year, and when you cut make sure you remove arisings (however a little dead plant litter can be good for snipe).

- Ensure there are suitable feeding areas nearby (shallow scrapes that hold water semi-permanently, pools with muddy shallow margins) as snipe tend to feed in cover very close to their nests.

- Combining rush management with additional interventions to improve habitat quality may thus be beneficial, such as the creation of wetter depressions or flushes and blocking of drainage ditches.

- Spring operations should be undertaken before mid-March should conditions allow.



Fig. 2



WHAT YOU CAN DO FOR LAPWING ON YOUR FARM

■ Lapwing nest in open grassland with a short sward and small tussocks of less than 15cm high. They do not nest where rush cover is too high and prefer wet areas with a scattering of rush or tussocky grass (see fig. 3 – favourable rush habitat for lapwing).

■ Bare ground should cover no more than 10% of the field, and tussocks/clumps should be between 15-30 cm tall and covering up to 30% of the field. The rest of the field should contain a short sward (less than 5cm high).

■ They prefer an open aspect, with limited trees and/or shrubs, enabling them to spot approaching threats - light cover of taller tussocks offer the chicks shelter from predators; however, unlike snipe and curlew that rely heavily on concealment, lapwing keep close watch on their chicks and noisily mob threats.

■ You should not cut all of the rush at once (ideally approx 50%), even in a dry year, and when you cut make sure you remove arisings.

■ Ensure there are suitable feeding areas nearby (shallow scrapes that hold water semi-permanently, pools with muddy shallow margins) – lapwing will travel some distance from their nests to find suitable feeding areas.

■ Spring operations should be undertaken before mid-March should conditions allow.



Jonathan Groom (SWT)



Jonathan Groom (SWT)

WANT TO KNOW MORE - USEFUL WEBLINKS

[South West Peak Landscape Partnership - Working for Waders](#)

[Curlew Recovery Partnership](#)

[Farmer Clusters: World Curlew Day CRP online seminar by Chloe Palmer \(Peak District Farmer Clusters\)](#)

GENERAL GUIDANCE

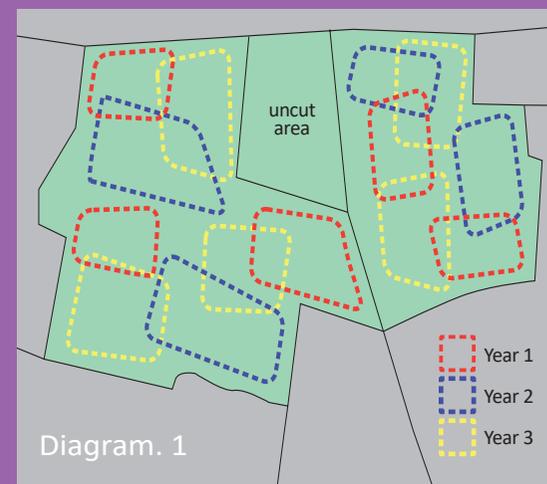
■ Sometimes low intensity grazing will be the preferred management mechanism rather than cutting. Graze with cattle where possible, as this is more beneficial for rush management. Where grazing alone is not sufficient to provide the sward requirements for the target species then cutting on an appropriate rotation can be added (refer to diagram 1 below). Seasonal low-level grazing relative to the field carrying capacity is best to avoid trampling from short term heavy stocking.

■ Rush management and any other field operations should typically be carried out from 15th August, when the breeding season has ended, and chicks have fledged. Note that snipe do breed later than curlew and lapwing so exercise caution. Ground conditions must be dry to avoid damage to the sward and underlying soil/peat.

■ Rush should be cut in blocks to avoid creating linking pathways for predators to follow and find nesting birds, their eggs, and their young. Lifting the flail/cutter between the cut blocks helps to reduce this risk. Cattle grazing with intermittent rush cutting can help deliver this uneven pattern. Blocks should be cut each year on a rotational basis as illustrated in diagram 1.

■ In the majority of cases rush management by chemical means is not desirable or required. It is important that you avoid weed wiping on botanically important fields.

■ Fostering innovation and collaboration will make work on difficult sites more sustainable (e.g. sharing machinery, knowledge, expertise).



This example plan (left) is for an area of rush covered fields. Each set of dotted line patches indicates a cutting area for a single year. After three years you would start the cycle again.

Note that these are approximate shape/areas and as long as you don't cut more than 1/3 of the rush area each year, slight variations and overlaps between years are perfectly acceptable and even encouraged.

The layout and shape of the patches will depend on the topography and accessibility of each field.