



Managing grassland for waders



Above: Taller vegetation offers breeding opportunities for snipe and curlews, while lapwings prefer shorter vegetation. Pool edges provide important feeding areas.

Several species of wading bird breed in damp pastures and meadows, including the curlew, snipe, lapwing and redshank. Over the last 20 years, all four have seen marked declines on lowland grasslands, due to a combination of intensification of grassland management on drier fields and too little management on wetter grassland areas. Each species has its own breeding habitat preference – based largely on sward height, structure and soil dampness.

BENEFITS FOR WILDLIFE

Grassland that provides the dampness and diversity of sward structure favoured by breeding waders can also provide:

- suitable breeding habitat for reed buntings, sedge warblers, grasshopper warblers and skylarks.
- a rich habitat for invertebrates, which provide an important food source for the many birds that feed their chicks insects in spring.
- seed heads from grasses and broadleaved plants, which provide food for linnets and other seed-eating birds.

Breeding habitat requirements

Lapwing	Short grassland (average sward height around 5 cm) with scattered occasional taller tussocks (< 10%). Take chicks to feed at damper flushes and edges of temporary or permanent pools.
Curlew	Plenty of cover with average sward height around 15 cm eg unimproved hay meadows, upland rough pastures.
Snipe	Wet pastures and peat bogs with a mosaic of taller vegetation (> 30 cm) for nesting, interspersed with short vegetation (< 10 cm) for feeding. Soil soft enough to penetrate easily with a six-inch nail.
Redshank	Mosaic of short, damp grassland, 5–15 cm high, with some taller tussocks. Some standing water through the breeding season, particularly in May and June.

MANAGING GRASSLANDS FOR WADERS

- It is important to identify the birds that are present in or likely to use a field and manage it according to their needs. However, variations across a field often provide suitable habitat for more than one species.
- When preparing to manage new sites, select larger fields with an open aspect, adjacent or relatively near to existing populations of waders. Select areas where disturbance will be minimal.

Grazing

- Creating a mosaic of shorter grass interspersed with taller tussocks through extensive grazing, can provide ideal breeding conditions for a number of wader species.
- Avoid grazing through the nesting period where possible. However, some grazing may be essential to maintain the desired sward structure, particularly where lapwings and redshanks breed.
- Once birds have bred, sites can be grazed more intensively. However, grazing will need to be adjusted before the end of the growing season, so that the desired sward structure is in place by early March.
- Vegetation growth varies according to a field's fertility, soil type, climate and season. It is, therefore, more important to adjust grazing pressure to achieve the desired sward structure in each field, rather than adhere to a stocking rate for the site.
- Cattle are often preferred, as they create a favourable tussocky vegetation structure and are more tolerant of the coarser vegetation that is sometimes associated with wet grasslands. They also help control rushes.

However, sheep, horses or a combination of livestock types can also be used effectively.

Cutting

- Some waders, notably curlews, can be attracted to nest in damp meadows, particularly unimproved fields where growth is less lush. Avoid mowing such meadows before mid-July where possible.

Wetness

- Spring water levels are critical for breeding waders. Water tables need to be high enough to maintain worms and other invertebrates near the soil surface so birds can find food. Snipe require soil that is soft enough to probe for food in (test with a six-inch nail).
- On lowlands that have previously been drained, it is often necessary to raise water levels, using structures such as sluices. They can be allowed to lower naturally during the summer, though some damp areas should persist at least until late June.
- In uplands, high rainfall retains dampness later into the spring. Temporarily blocking the occasional field drain or ditch can create wetter patches or small areas of standing water, ensuring important feeding areas persist.
- Fields of varied topography provide both wet feeding areas and drier nesting places. Digging shallow surface drains or shallow scrapes can create this mix artificially, particularly on less permeable soils. Existing ditches can also be re-profiled and pools created through the breeding season using temporary sluices or sandbags. Temporary shallow pools through May and June provide

rich feeding areas. In drier areas, a water source, such as a ditch or spring, may be required to maintain levels until June. Advice should be sought before putting such features in place.

- After July, lower water levels are required to allow effective sward management.

Other management

- Although breeding waders can be attracted to improved grassland, ceasing artificial inputs will improve the habitat. Less vigorous grass growth allows lower stocking rates through the breeding season, so reducing nest trampling and disturbance. Ceasing inputs also improves foraging efficiency by increasing the availability of larger invertebrates.
- Conversely management of some areas of upland grassland may benefit from nutrient inputs to provide a more productive sward than the semi natural acid grassland to which the area would revert.
- Some rush can help provide cover for breeding waders and their chicks, but rush infestation can be a problem on some wet grassland. If rush covers more than one third of the field area, it can have a detrimental effect on all breeding waders. Lapwings are affected once rushes occupy more than 10% of the field.
- Mechanical operations, such as rolling, chain-harrowing and topping should be avoided during the breeding season.
- Avoid planting trees where they will overlook breeding wader habitat.

Financial assistance is available for managing, restoring or creating suitable breeding habitat for waders.

KEY POINTS

- Adjust stocking rates in autumn/winter to create the desired sward structure the following spring.
- During spring, soils need to be damp enough to give birds access to soil invertebrates.
- Cease artificial inputs and avoid mechanical operations during the breeding season.

See also the RSPB Scotland advisory sheets on:

- Lapwing
- Snipe
- Curlew
- Redshank
- Rush management
- Managing water levels to benefit birds

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