

Illustrated guide to managing farmland for lapwings

Lapwings belong to the plover group of wading birds and are also widely known as peewits. Although still found on farmland throughout England these distinctive birds have suffered from a major decline in recent decades and are now recognised as a species of high conservation concern. High concentrations still occur on lowland wet grasslands and 'in-bye' land in the uplands, but the bulk of the breeding population nests on arable/mixed farmland where spring-sown cereals and bare/sparsely-vegetated fallow fields are the preferred nesting habitats, especially where these are near to unimproved pastures. This guide illustrates suitable conditions for lapwing in lowland areas at three key times of year.



Lapwing, chicks and (inset) egg

October onwards

Look out for lapwing

Look out for large flocks of lapwings feeding on open permanent grassland and large arable fields with open boundaries, especially where manure has been applied.

They often return to the same fields year after year. Golden plover often feed alongside lapwings. Earthworms form a major part of the winter diet of both species.

Lapwings may roost in large open arable fields or wet grassland.

Illustrated guide to grassland for lapwings

Ideal grassland structure from October onwards

On wet grassland where lapwing have been known to breed it is vital to have a predominantly short sward in place over winter to encourage breeding in the following spring.

When you remove stock for the winter aim for the majority of the sward to be short with some bare patches for winter feeding and a few taller tussocks or clumps to give cover for the chicks next spring.



Most of the field should look like this



Cross section of what most of the field should look like

The sward structure is probably ideal if:

- There is little dead plant litter.
- Scattered bare ground covers up to 10% of the area.
- Short sward, less than 5 cm tall covers more than 70% of the area.
- Scattered clumps 10-15 cm, or occasional taller tussocks make up about 20% of the sward.

Bare ground

Scattered hoof marks created in autumn and winter make small gaps in the sward. Lapwings may nest and feed in these areas in following spring and summer.

Overwintered stubble

Overwintered stubble benefits several species which have declined in recent years (eg skylark, yellowhammers and tree sparrows). If converted to fallow, these areas may attract breeding lapwings in the spring.



Yellowhammers and tree sparrow feeding in winter stubble

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Ideal overwintered stubble



Stubble field suitable for lapwing and other species



Cross section of over winter stubble

Weed-rich stubbles provide vital winter feeding habitats for seed-eating birds, many of which have declined greatly in recent decades, for example, skylark, yellowhammers, corn buntings and tree sparrows. Rather than drilling spring-sown crops across the whole field, ideal nesting conditions for lapwings can be created by providing a false seed-bed in blocks of 1-2 ha in the centres of large open fields. These fallow nesting plots are especially good when created in arable fields that are adjacent to permanent pasture that are not bounded by high hedges or woodland.

March

Look out for lapwings

Signs of lapwings looking to breed on your fields include their tumbling display flights and evocative calls (especially on clear moonlit nights). They may start laying from mid-March. Incubation lasts 25-32 days.

Wet areas

Shallow muddy water margins or damp areas of grassland are important feeding areas for lapwings and, later, their chicks.

Wet grassland too rank for lapwings



Grassland too rank for lapwing



Cross section of grassland that is too rank

Only very small areas of wet grassland should look like this as the sward is too tall for lapwings to see their prey, or approaching predators, easily.

The sward is too rank if:

- Most is taller than 5 cm over more than 60% of the area.
- Tussocks 30-40 cm tall cover more than 30% of the area.
- Bare ground covers less than 5% of the area.

If you need to roll or harrow, do so before mid-March to avoid damaging nests.



Brooding lapwing

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Ideal grassland structure in March



Tumbling display flight over wet grassland with an ideal sward structure for breeding lapwing



Cross section of ideal wet grassland field

The conditions are probably suitable where:

- There is a predominantly short sward of 3 cm or less over at least 80% of the area for feeding and nesting
- There are occasional bare patches (up to 10%) for nesting.
- There is a scattering of small clumps or tussocks 10-15 cm tall on up to 20% of the area for chicks to hide in.
- Little dead plant litter.

Trampling damage

Many lapwing eggs and chicks are destroyed by stock trampling. You can minimise this by not grazing between mid-March and May or stocking at low densities until mid-May. Cattle are less of a threat to lapwing nests than sheep.

Lapwings and trees

Breeding lapwings suffer heavy losses in fields surrounded by trees, as predators such as crows use the trees as look-outs for locating eggs and chicks. Crows flying over breeding sites are driven off by lapwings.

Incubating birds need an all-round view of approaching predators.



Lapwing distraction display, a sign they are nesting

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Ideal spring fallow in March



Ideal stubble for lapwing nesting



Cross section of ideal stubble

Fallow should be cultivated with tines or discs in as short a time as possible, between 1st and 20th of March to provide attractive ground for prospecting lapwings and avoid subsequent damage to nests.

Lapwing like very short or no vegetation. Bare ground on more than 90% of the area will probably not be too short for them to nest, although could cause other problems such as soil run-off. Once hatched they may move their chicks onto adjacent grassland to feed.

Areas of spring fallow greater than two hectares are most likely to be successful for breeding lapwings. Fallow areas also benefit other ground nesting birds such as skylark and annual arable plants such as poppies and corn marigold.

Too rank for lapwings in March



Grassland too rank for lapwing to nest



Cross section of grassland too rank

Only very small areas of wet grassland should be this rank as it is too tall for lapwing to be able to find food or see approaching predators.

The sward is probably too rank if:

- Most of the sward (more than 60%) is taller than 5 cm.
- Tussocks 30-40 cm cover more than 30% of the area.

Wet areas

Damp grassland and shallow muddy margins to water are rich in insect larvae and so are important feeding areas for lapwing chicks.

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May and June

Look out for lapwing

Lapwings flying in an agitated state calling almost continuously is a sure sign that there is either a nest or a young chick nearby. Breeding lapwings often try to distract or drive away intruders, including cattle and people.

Most lapwing eggs will hatch by mid-May. Parents lead the chicks away from the nest to look for food, often taking them to areas of damp short grassland. The young can fly 35-40 days after hatching.

Ideal grassland structure in May and June



Most of the field should look like this



Cross section of an ideal sward

Aim for a predominantly short sward with bare patches for nesting and scattered tussocks or clumps for chicks to hide from predators.

The sward is probably ideal where:

- A short sward, less than 5 cm tall covers more than 70% of the field.
- Scattered clumps 10-15 cm (or occasional taller tussocks) make no more than 20% of the area.
- Scattered bare ground on up to 5%.

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Ideal spring fallow in May and June



Ideal spring fallow



Cross section of spring fallow

The fallow should be maintained until 31st July or later as lapwings will continue to use these areas for nesting and annual arable plants including poppies will flower and set seed. The amounts of bare ground and re-vegetated ground will vary from site to site.

Chicks feed on small insects and other invertebrates which they find by sight.



Chick searching for food

Too rank for lapwings in May and June



Grassland too rank for lapwing



Cross section of sward too rank

Only very small areas should become this rank as it is too tall for lapwings to be able to find food or see their predators.

The sward is probably too rank if:

- More than 60% of the sward is taller than 5 cm.
- Tussocks 30-40 cm cover more than 30% of the area.
- There is less than 5% bare ground.

Mid-summer grazing

Grazing levels are not so critical after the end of June as most young lapwings will have flown, although do check as a few late nesting pairs may still have chicks in mid-July.

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Further information

Natural England Technical Information Notes are available to download from the Natural England website at www.naturalengland.org.uk.

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