

ENVIRONMENTAL FARMING SCHEME SPECIES-SPECIFIC GUIDANCE Managing habitat for breeding waders

Version 1.2



Photos of curlew, snipe and redshank by Laurie Campbell. Lapwing photo by Dereck Charles

The Environmental Farming Scheme (EFS) is the new agri-environment scheme for Northern Ireland funded under the Rural Development Programme 2014 – 2020. EFS supports farmers and land managers to carry out environmentally beneficial farming practices over and above mandatory requirements. One of the key aims of the scheme is to restore, preserve and enhance biodiversity. This general guidance for breeding wader habitat management has been written for EFS Planners and agreement holders. It provides general guidance and advice on important features and habitat management for breeding wader species.

The four target species for the EFS Option 'Breeding wader site remedial management' are curlew, lapwing, redshank and snipe. These birds breed in wet areas in uplands and lowlands. Over recent decades their numbers have been in serious decline and their breeding populations have become fragmented. Restoring, creating or maintaining suitable breeding habitat is therefore extremely important to their conservation, helping to increase their numbers and range in core areas and the wider landscape. The four target species have very broadly similar needs that overlap, though guidance is provided for habitat management for each species.

It is important to identify which waders are currently or have previously been on the farmland and to manage it according to their specific needs. For example, sites with lapwing only need management for lapwing. However, where the wader species is unknown or there is more than one wader species present then variation across the field can provide habitat for them all.

The management requirements for this Option are outlined in the [breeding wader site remedial management](#) information sheet on the DAERA EFS website. Additional EFS Options that will help deliver management best practice for the breeding waders are listed later in this document.

However, where priority habitat is present, management for the underlying priority habitat must take precedence over the breeding wader remedial management Option. EFS habitat remedial management requirements will provide protection and favourable management for both breeding waders and priority habitat.

There are seven main management needs for breeding waders which are detailed below.

1. Ability of landowner or land manager to deliver the EFS Option

Applicants should be capable and willing to undertake the required management, namely be able to:

- Create suitable sward/vegetation structure.
- Maintain or provide high water levels on the land.
- Maintain or provide surface water.

2. Open aspect

As waders nest on the ground they need to look out for predators so land should ideally:

- Be open, with any surrounding hedges less than 2 m high.
- Have minimal disturbance e.g. from footpaths or public rights of way.
- Have no overhead pylons or power lines.
- Have no in field trees or be beside woodland.

3. Sward/vegetation structure

This is a key aspect and more specific guidance on sward/vegetation height and structure is provided for each species. Depending on the site, it may be appropriate to manage the land for more than one species. Ideally, the vegetation structure is created through livestock grazing and preferably by cattle (native breeds if possible), with late summer to early winter grazing creating the structure for the next spring's breeding season.



The first picture on the left shows dense rush covering the field area and on the right is the same field after grazing. Varied vegetation height creates good habitat structure for breeding waders. Photos by RSPB.

For both upland and lowland areas, the aim is to create or maintain a mosaic of short (<5 cm), medium (5 - 10 cm) and tall vegetation (>10 cm) cover for the breeding season. This can be maintained during the breeding and chick rearing periods by grazing livestock at appropriate low densities. It is important that overwintered cattle are not put directly onto the breeding wader option sites as this increases the likelihood of nest and chick trampling. Cattle should first be put onto ground which is not managed as part of the breeding wader site remedial management Option until they have calmed. For this reason, the landowner or manager should have access to grazing areas not managed under the breeding wader Option.

4. Wet features

Wet features include scrapes, drains and blocked grips, gutters and standing surface water. Some of these features may already be present on the land, but if they need to be created there are EFS Options and / or Non Productive Investments (NPIs) available to facilitate this (see section **Supplementary EFS Options – Non-Productive Investments** below).



Scrapes and shallow profile drains and ditches provide valuable feeding areas for wader adults and their chicks. Photo by RSPB.

Operations to create, profile or maintain wet areas should be done outside the breeding and rearing period and during the driest period in late summer (after mid August for snipe) and early autumn.

Between the 1st March and the 1st July there should be approximately 100 - 150 m of wet feature edge per hectare and around 50% of this should have a shallow, muddy edge to allow chicks to feed. Field edge drains with shallow edges and profiles with no tall vegetation are counted as wet edge, but in-field features like scrapes or gutters may be needed too.

5. Management of water levels

Soft ground is important to allow the birds to feed so the sites should have a high water table that can be maintained from 1st March – 1st June. As a guide, the ground should be easily penetrated with a six inch nail.

6. Rush management

Rushes require management but form an important component of breeding wader habitat, providing cover for nests, chicks and adults. The actual degree of management will depend on the target species being managed for, but in general the rush cover in a field should be scattered throughout and in tussocks. Consideration should be given to amending rush-cutting dates (NPIs and BWG management requirements) to allow for the possible presence late nests and broods.

7. Predator control

In some cases breeding wader success is hampered by predation of eggs and chicks by mammals and/or birds. Predator control measures and perch removal can be considered provided all other aspects of the breeding wader option are being delivered. There are supplementary options available to facilitate predator control if required.

SUPPLEMENTARY EFS OPTIONS and Non-Productive Investments (NPIs)

As part of the EFS breeding wader site remedial management Option, there may be additional management works or activities necessary to prepare or modify the land. A number of options and NPIs are available to facilitate this and are listed below. The list is not exhaustive and full list of NPIs and their information sheets can be downloaded from the DAERA website at:

www.daera-ni.gov.uk/publications/environmental-farming-scheme-higher-non-productive-investments-npis

NPIs that may be of benefit with the breeding wader site remedial management Option include:

[Bankside reprofiling \(ABR\)](#)

[Creation of scrapes \(COS\)](#)

[Creation of wetlands \(AWC\)](#)

Ditch blocking – plastic piling dams [large \(DBL\)](#), [medium \(DBM\)](#) and [small \(DBS\)](#)

[Fence removal \(FRL\)](#)

[Predator control trap \(PCT\)](#)

[Predator perch removal \(APR\)](#)

Rush control, [primary \(PRC\)](#) and [follow up \(RFC\)](#)

Scrub control – heavy, stems greater than 7cm diameter [machine cut \(SHM\)](#) or [manual cut \(SHR\)](#) and [follow up treatment \(SHF\)](#)

Scrub control – light, stems less than 7cm diameter [machine cut \(SLM\)](#) or [manual cut \(SLH\)](#) and [follow up treatment \(SLF\)](#)

[Structures to raise water levels \(ARW\)](#)

Key dates:

15th March – 14th July: This is the main breeding season and no management activities beyond grazing should take place on the land. Scrub control must not be undertaken after the **1st March**. It is crucial that grazing continues during the breeding season at a stocking density of no more than 0.75 LU per hectare. Note also that breeding snipe may be present as late as August.

15th July – 14th March: All other management activities should take place during this time. If there are late breeding snipe present, the dates are **15th August – 14th March**. Scrub control must not be undertaken before **31st August**. Stocking density is not set, but it is important not to overgraze or undergraze so that the habitat structure is created or maintained for the next breeding season.

ENVIRONMENTAL FARMING SCHEME SPECIES-SPECIFIC GUIDANCE

Managing habitat for breeding waders - curlew



Curlew in flight. Photo by Mark Hamblin

Curlew, also known as *courlie* or *whaap*, are large, mottled brown wading birds with long legs and a long, downward curving bill. They mainly breed in wet grassland and bog areas and over recent decades numbers of breeding curlew have dwindled to the point their conservation is now of high concern. Active management of suitable land is needed in order to encourage successful breeding of curlew, helping to increase their number and so ensuring their continued presence in our rural landscapes. This guide sets out the habitat these birds need and shows how with the right management through the year, good habitat can either be created or maintained.

Spring

Curlew return to their breeding areas in early spring and birds will be seen performing display flights while calling. The breeding season starts toward the end of **March to early April** with eggs being laid from **March to May**. The chicks hatch after around 28 days and are fledged by around 36 days.

The land should have a consistently high water table (20-30cm below ground surface) from March through to July as damp or wet ground is crucial as it allows the birds to feed. If it is too dry, they will not be able to probe the ground with their bills. A six inch nail can be used to test if the ground is soft enough – it should penetrate the soil easily. Scrapes and shallow edged drains are particularly important to create these conditions.

Vegetation should have tall tussocks to provide nesting areas and cover with shorter sward between tussocks. The ideal structure of the habitat is:

- Short sward (around 5cm) over between 30-40% of the area.
- Taller tussocks (15-30cm) covering 30% of the area.
- Bare ground up to 10%.
- Wet, soft ground or shallow open water (up to 10cm) over 20-30% of the area.

The application of lime and/or any organic (except farmyard manure) or chemical fertiliser is not permitted between 1st February and 15th July. Grazing regime is also very important as many nests can be lost due to trampling by livestock. Stock at low density (0.75 LU/ha) between the end of March to the end of June. Cattle are the preferred livestock as they have a lesser impact on curlew nests and are good for the habitat structure. It is important to not put cattle onto land managed for curlew immediately after winter housing as this can increase nest damage.

Curlew prefer open ground with few trees as predators use these vantage points to spot vulnerable chicks and eggs. Scrub or tree management may be required in some cases and must be completed before the 1st March and cannot recommence until after the 31st August.



Like other breeding waders, curlew nest on the ground so their eggs and chicks may be vulnerable if the land is heavily grazed. Photo by Laurie Campbell.

Summer – May to July

Breeding and chick rearing will continue up to the end of July.

The ideal structure for the habitat is:

- Short sward (around 5cm) over between 30-40% of the area.
- Tall tussocks (15-30cm) covering 30% of the area.
- Wet, soft ground or shallow open water over 20-30% of the area.

The amount of damp or wet areas are likely to shrink through the summer months so those that persist with the right habitat structure will be very important as feeding areas. However, should management operations be required, allowing the land to dry naturally to facilitate this is acceptable.

Trampling of nests and young by livestock can cause a significant problem, though grazing may be needed during this time to stop the vegetation becoming too tall. Stock at low density (0.75 LU/ha) if required up to the end of June to minimise egg and chick trampling and when normal or higher density grazing returns, it is important to not overgraze to keep the habitat structure.



If the land is used for silage or hay, or requires rush management, try to avoid cutting until mid July if possible as this reduces the chance of killing chicks. There are supplementary EFS Non Productive Investment (NPI) options for rush control – see the EFS breeding wader general advice document for details. Cutting from the centre of the field outward allows birds to escape to adjacent ground and it is preferable to leave the breeding wader land to be cut last. Checking the field for adult birds before cutting is also encouraged - this requires walking the field before starting to cut and if birds are present, consult DAERA for advice or if you are in the group option, contact the group facilitator.

Winter

From October to February, it's important to maintain or create the habitat structure described above for the next spring breeding season. Grazing to achieve the sward height and structure and other direct management such as scrub control should take place as and when appropriate during this time.

ENVIRONMENTAL FARMING SCHEME SPECIES-SPECIFIC GUIDANCE

Managing habitat for breeding waders - lapwing



Photo by Laurie Campbell

Lapwings, also known as *peewits* or *peesweeps*, are wading birds that mainly breed in upland habitats or on mixed farmland with some wet areas. Over recent decades their numbers have dwindled to the point their conservation is now of high concern. Active management of suitable land is needed in order to encourage successful breeding of lapwing, helping to increase their number and so ensuring their continued presence in our rural landscapes. This guide sets out the habitat these birds need and shows how with the right management through the year, good habitat can either be created or maintained.

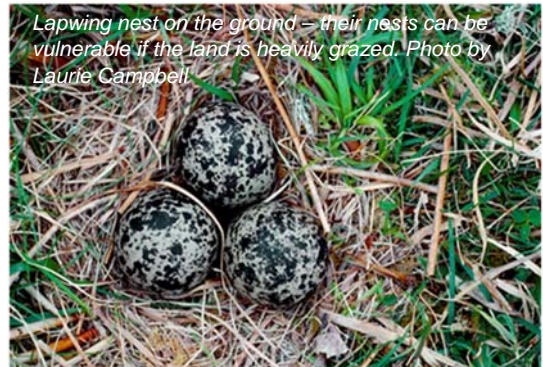
Spring

Lapwing that are preparing to use the land during the breeding season will perform display flights and calls. They will lay their eggs from as early as **mid March**, with hatching occurring between 25-32 days after laying. For this reason, any rolling or harrowing required in the field should take place before mid March to avoid damaging nests or chicks.

Wet areas are important for both the adults and chicks to feed. Open water should have shallow, muddy edges to make foraging for food easier and it is im-

portant to maintain any damp areas in grassland for the same reason.

The application of lime and/or any organic (except farmyard manure) or chemical fertiliser is not permitted between 1st February and 15th July. Grazing regime is very important as many nests can be lost due to trampling by livestock, so stock at low density (maximum of 0.75 LU/ha) from mid March until the end of June. Cattle are the preferred livestock as they have a lesser impact on lapwing nests and are good for the habitat structure. However, sheep can also be used if a sufficiently short sward cannot be delivered by cattle alone in time for the breeding season. It is important to not put cattle onto land managed for lapwing immediately after winter housing as this can increase nest damage.



Lapwing nest on the ground – their nests can be vulnerable if the land is heavily grazed. Photo by Laurie Campbell

Lapwing prefer open ground with few trees as predators use these vantage points to spot vulnerable chicks and eggs. Scrub or tree management may be required in some cases and must be completed before the 1st March and cannot recommence until after the 31st August.

Early summer

If there is a nest or chicks present, lapwing will be seen flying in an agitated state, almost continuously calling. They will also act to drive away any intruders on the ground, including livestock. The majority of eggs will have hatched by mid May time and the young can fly 35 – 40 days after hatching. The ideal structure for the habitat is:

- A mainly short sward of less than 5cm over 70% of the ground.
- Bare patches covering up to 10% of the area.
- Scattered tussocks of taller vegetation (10-15cm, up to 20% of the area).



Scattered tussocks of taller vegetation provide good cover for chicks. Photo from RSPB

Mid summer

The vast majority of young lapwings will have flown by the end of June, so grazing levels are not as critical at this time. Some late nesting pairs may still be raising chicks as late as mid July, but the agitated, calling behaviour mentioned above will indicate if this is the case. If the land is used for silage or hay, or requires rush management, try to avoid cutting until mid July if possible as this reduces the chance of killing chicks. There are supplementary EFS Non Productive Investment (NPI) options for rush control – see the EFS breeding wader general advice document for details. Cutting from the centre of the field outward allows birds to escape to adjacent ground and it is preferable to leave the breeding wader land to be cut last. Checking the field for adult birds before cutting is also encouraged - this requires walking the field before starting to cut and if birds are present, consult DAERA for advice or if you are in the group option, contact the group facilitator.

Winter

Lapwing flock together in winter with other birds to feed and roost on grassland or open arable fields. In many cases they come back to the same fields year after year, so there is a good chance you will already know if lapwings use your land. They can also be found in coastal areas.

Preparation for the spring breeding season can begin from **mid July onwards**. For grassland, having a mostly short sward with scattered tussocks of taller vegetation and some bare patches on land encourages spring breeding the next year. Ideal sward structure going into the winter months would be:

- More than 70% of the land area has short sward (less than 5 cm height).
- Taller tussocks of vegetation (10 – 15 cm) are scattered over around 20% of the area.
- Bare ground is up to 10% throughout the area.
- Little dead plant material throughout.

The bare ground provides good winter feeding areas and for the coming spring breeding, the short sward allows nesting birds to easily spot predators as well as food and the taller patches give places for the chicks to hide.

In arable fields, spring sowing is perfect in combination with fallow or bare patches where the birds can nest. If crops are winter sown, they are too dense for nesting lapwing and their chicks. Sowing arable crops in fields next to grassland if possible is an ideal mix for lapwing. Having fallow and/or bare ground is also desirable for nesting (up to 2 ha if achievable), though once the chicks have hatched the birds may move onto the grassland for feeding.

ENVIRONMENTAL FARMING SCHEME SPECIES-SPECIFIC GUIDANCE

Managing habitat for breeding waders - redshank

Redshank are brown-grey wading birds with distinctive red legs and a straight bill that darkens toward its tip. They breed on lowland wet grassland or coastal saltmarsh habitats. Over recent decades their numbers have dwindled to the point their conservation is now of high concern. Active management of suitable land is needed in order to encourage successful breeding of redshank, helping to increase their number and so ensuring their continued presence in our rural landscapes.



An adult redshank surveys its territory. They can often be seen standing guard on fence posts during the breeding season. Photo by Laurie Campbell.

This guide sets out the habitat these birds need and how with the right management through the year, good habitat can either

be created or maintained. The ideal habitat is a mosaic of short, damp grassland, 5-15 cm high with some taller tussocks.

Spring

The breeding season for redshank begins toward the **end of March to early April** and adults can be observed standing guard on fence posts or prominent rocks in coastal areas. They will lay three to five eggs that hatch in around 21 days, with the chicks fledging between 25-35 days after. Wet areas are important for both the adults and chicks to feed. Open water should have shallow, muddy edges to make foraging for food easier and it is important to maintain any damp areas in grassland for the same reason.

The application of lime and/or any organic (except farmyard manure) or chemical fertiliser is not permitted between 1st February and 15th July. Grazing regime is very important as many nests can be lost due to trampling by livestock. Either try to avoid grazing at all between the start of April and the end of June, or stock at low density (0.75 LU/ha) until the end of June. Cattle are the preferred livestock as they have a lesser impact on redshank nests and are good for the habitat structure. It is important to not put cattle onto land managed for redshank immediately after winter housing as this can increase nest damage. Redshank prefer open ground with few trees as predators use these vantage points to spot vulnerable chicks and eggs. Scrub or tree management may be required in some cases and must be completed before the 1st March and cannot recommence until after the 31st August.

Summer

The ideal structure for the habitat is:

- A mainly short sward of less than 5-10 cm over 70% of the ground.
- Scattered tussocks of taller vegetation (10-15 cm, up to 20% of the area).
- Bare patches covering up to 5% of the area.

Stocking levels can be increased from mid July, but it is important not to overgraze so as to maintain the habitat structure going into the winter.

If the land is used for silage or hay, or requires rush management, try to avoid cutting until mid July if possible as this reduces the chance of killing chicks. There are supplementary EFS Non Productive Investment (NPI) options for rush control – see the EFS breeding wader general advice document for details. Cutting from the centre of the field outward allows birds to escape to adjacent ground and it is preferable to leave the breeding wader land to be cut last. Checking the field for adult birds before cutting is also encouraged - this requires walking the field before starting to cut and if birds are present, consult DAERA for advice or if you are in the group option, contact the group facilitator.



A mix of scattered tussocks of taller vegetation and shorter sward is ideal. Photo by Brad Robson.

Winter

Preparation for the spring breeding season can begin from **mid July onwards**. For grassland, having a mostly short sward with scattered tussocks of taller vegetation on land encourages spring breeding the next year. Ideal sward structure going into the winter months would be:

- A mainly short sward of less than 5-10cm over 70% of the ground.
- Scattered tussocks of taller vegetation (10-15cm, up to 20% of the area).
- Bare patches covering up to 5% of the area.

The bare ground provides good winter feeding areas and for the coming spring breeding, the short sward allows nesting birds to easily spot predators as well as food and the taller patches give places for the chicks to hide.

ENVIRONMENTAL FARMING SCHEME SPECIES-SPECIFIC GUIDANCE

Managing habitat for breeding waders - snipe

Snipe are mottled brown wading birds with short legs and long, straight bills. They mainly breed on uplands in wet grassland and bog areas and over recent decades their numbers have dwindled to the point their conservation is now of high concern. Active management of suitable land is needed in order to encourage successful breeding of snipe, helping to increase their number and so ensuring their continued presence in our rural landscapes.



Photo by Laurie Campbell

This guide sets out the habitat these birds need and shows how with the right management through the year, good habitat can either be created or maintained.

Spring

A sure sign that snipe are preparing to use the land during the breeding season is spotting males on diving display flights, making a distinctive vibrating sound called 'drumming' from March onward. They are otherwise difficult to spot as they sit tight, taking off in a zig-zag pattern at the last moment when disturbed. Snipe will begin to lay their eggs from as early as **mid April**.

The land should have a consistently high water table (20-30 cm below ground surface) from March through to August as damp or wet ground is crucial as it allows the birds to feed. If it is too dry, they will not be able to probe the ground with their bills. A six inch nail can be used to test if the ground is soft enough – it should penetrate the soil easily.

Vegetation should have tall tussocks to provide nesting areas and cover with shorter sward between tussocks.

The ideal structure of the habitat is:

- Short sward (<10 cm) over between 30-40% of the area.
- Tall tussocks (>30 cm) covering 60-70% of the area.
- Bare ground up to 10%.
- Wet, soft ground or shallow open water (up to 10 cm) over 20-30% of the area.

The application of lime and/or any organic (except farmyard manure) or chemical fertiliser is not permitted between 1st February and 15th July. Grazing regime is also very important as many nests can be lost due to trampling by livestock. Stock at low density (less than 0.75 LU/ha) during the breeding season. Cattle are the preferred livestock as they have a lesser impact on snipe nests and are good for the habitat structure. It is important to not put cattle onto land managed for snipe immediately after winter housing as this can increase nest damage.



*Damp ground and wet areas are crucial feeding places for snipe.
Photo by Neal Warnock*



Varied vegetation height achieved with grazing provides ideal habitat. Photo by RSPB

Snipe prefer open ground with few trees as predators use these vantage points to spot vulnerable chicks and eggs. Scrub or tree management may be required in some cases and must be completed before the 1st March and cannot recommence until after the 31st August.

Summer – May to August

Breeding will continue up to mid July in most cases but may continue on into August. However, during this time as the birds incubate their eggs there will be less obvious activity beyond drumming or calling birds, though adults may be observed perching on fence posts.

The ideal structure for the habitat is:

- Short sward (<10 cm) over between 30-40% of the area.
- Tall tussocks (>30 cm) covering 60-70% of the area.
- Some regrowth of sward between the tussocks.
- Wet, soft ground or shallow open water over 20-30% of the area.

The amount of damp or wet areas are likely to shrink through the summer months so those that persist with the right habitat structure will be very important.

Trampling of nests and young by livestock can cause a significant problem, though grazing may be needed from June to stop the vegetation becoming too tall. Stock at low density if required up to mid July to minimise egg and chick trampling and when normal or higher density grazing returns, it is important to not over-graze to keep the habitat structure.

If the land is used for silage or hay, or requires rush management, try to avoid cutting until mid July if possible as this reduces the chance of killing chicks. There are supplementary EFS Non Productive Investment (NPI) options for rush control – see the EFS breeding wader general advice document for details. Cutting from the centre of the field outward allows birds to escape to adjacent ground and it is preferable to leave the breeding wader land to be cut last. Checking the field for adult birds before cutting is also encouraged - this requires walking the field before starting to cut and if birds are present, consult DAERA for advice or if you are in the group option, contact the group facilitator.

Winter

The structure habitat created earlier in the year will continue to benefit the birds. Small groups of snipe may be spotted feeding and roosting on suitable fields from October onwards. However, as they sit tight it may not be immediately obvious unless they are disturbed. Some scattered bare ground from hoof prints create good feeding areas, but poaching should be avoided.

Keep existing drains open and accessible with shallow sloping sides to provide good feeding areas for the birds.