HOW CAN I MANAGE GRASSLAND TO BENEFIT BIRDS?

GAZED PASTURE

Nesting habitat

Birds that nest in grassland have strong preferences for certain soil structures. Grazing is vital for creating the nesting habitat of birds needing short or structurally diverse grassland, such as lapwings and curlews. Grazing levels need to be manipulated to maintain the desired soil structure throughout the breeding season. Lapses require a tussocky, hoof-printed sward of 5 cm or less, whereas curlews prefer a taller, tussocky sward of 15 cm that provides camouflage. Both species need an open landscape and damp ground, and lapses in particular will benefit from access to standing water. Leaving damp hollows uncut will provide cover for chicks.

Feeding habitat – soil and surface-active insects

Birds such as lapwings, starlings, choughs and ring ouzels that feed on earthworms, leatherjackets and other soil invertebrates prefer short-grazed grassland of 5 cm or less. Two things are important here – managing the grassland to promote a good population of soil invertebrates and grazing to enable access to the soil surface for feeding birds.

The following will promote soil invertebrate populations:

- Use of farmyard manure; earthworms are prevalent in areas where manure has been applied in the previous season. Solid farmyard manure is particularly beneficial as it takes longer to break down and increases soil organic matter.
- Avoid frequent ploughing and reseeding. After cultivations, earthworms take up to four years to recover to levels found in permanent pasture.
- Avoid treatment of stock with anthelmintics at any time during the bird nesting season.

Managing the grassland to promote a good population of soil invertebrates and grazing to enable access to the soil surface for feeding birds.

Feeding habitat – seeds and insects

A wide range of birds, such as yellowhammers and twits, feed on grass and flower seeds throughout the year. Taller vegetation height with a lower grazing pressure that allows grasses and flowers to set seed are preferred by these species.

The chicks of many of these species are dependent on insect food, with larger insects, such as grasshoppers, preferred. Taller vegetation and long-lived tussocks allow larger insects to complete their lifecycles and over-winter.

HAY AND SILAGE MEADOWS

Nesting habitat

Birds that require tall cover to nest in are attracted to fields turned out for fodder conservation. They then need sufficient time for incubation and chicks to fledge before mowing. Hay fields generally provide more opportunities due to harvesting vegetation at a more mature growth stage, but less intensive mowing can allow silage haylage to provide suitable cover. When the grass harvest is spread out, it provides a succession of opportunities for nesting and feeding birds. Species such as the skylark are more likely to find several broods if periods of seven weeks are allowed between cuts, and curlews will have greater opportunity to breed successfully if meadows are cut after mid-July.

Feeding habitat – seeds, insects and small mammals

Opportunities for seed-eaters are greatest in meadows containing a diversity of plants. Those that contain dandelions and sorrels are particularly good for seed-eating birds. Leaving uncut margins and corners in mown fields extends the availability of seeds, provides a habitat for insects and can create habitat for small mammals, which are in turn hunted by barn owls and kestrels. Some aftermath grazing of these areas will be beneficial, but avoid grazing out the tussocky structure.

MECHANICAL OPERATIONS

Mechanical operations on grassland, such as muck spreading, rolling, topping and harrowing, can be particularly damaging to ground-nesting birds in the spring. Whenever possible, avoid carrying out these operations in the breeding season (April–July) in fields with breeding birds.

HEDGEROWS

Grazing

Tussocky grass bases and margins to hedgerows are beneficial for a range of species, providing nesting and feeding habitat. Grazing of hedge bases will reduce the value of the hedge to wildlife, as well as threaten the health of the hedge itself.

Nitrogen

It is important to keep artificial fertilisers away from the base of hedgerows, where a much wider range of plants can often be found. Plants begin to disappear at the lowest levels of artificial nitrogen application (25 kg N/ha/year).

UNIMPROVED SEMI-NATURAL GRASSLAND

Semi-natural grasslands retain most of the plants that would occur naturally, but their composition and structure has developed under traditional, low-intensity farming. Such grasslands often possess a great diversity of plants, insects and other wildlife. It can be particularly difficult trying to re-create semi-natural grasslands on improved semi-improved grasslands, making this maintenance of remaining areas particularly important.

Welsh grasslands vary enormously according to physical characteristics and management, and consequently provide nesting and feeding habitat for a wide range of important bird species such as lapwings, curlews, yellowhammers, ring ouzels, starlings and choughs. Different species have different preferences, such as certain levels of soil wetness or sward heights, depending on how they feed and how they avoid predators. The grassland management on farms significantly determines the availability of particular feeding and nesting resources.

KEY SPECIES TO BENEFIT FROM GRASSLAND MANAGEMENT

- Lapwing
- Curlew
- Ring ouzel
- Starling
- Chough
- Yellowhammer
- Twite

Grasslands can provide nesting and feeding habitats for a wide range of birds, including lapwings.

BENEFITS FOR WILDLIFE

Grazed pastures

Grazed pastures, depending on their physical characteristics and grazing management, provide nesting habitat for ground-nesting birds such as the lapwing and curlew, and feeding habitat for species such as yellowhammer and chough. The grazing regime is fundamental to providing the right conditions for different species.

Hay and silage meadows

Birds that require tall cover to nest in, such as curlews and skylarks, can find suitable nesting habitat in fields turned out for fodder conservation. Hay meadows are more likely to allow plants to flower and seed, providing seed and insect food for birds such as the yellowhammer, linnet and twite. Hay meadows are also more likely to provide the structure required for nesting by curlews. Silage fields have lower wildlife value, but small modifications in management can significantly increase their value to birds.

You can get further information on this and other ways of managing your farm for wildlife from:

The Advisory Officer,
The RSPB North Wales Office,
Maws y Flynnen, Penhosagwyddel,
Bangor, Gwynedd LL57 2DW
Tel: 01248 385500

Countryside Council for Wales,
Maws y Flynnen, Penhosagwyddel,
Bangor, Gwynedd LL57 2DW
Tel: 01248 363600

Farming and Wildlife Advisory Group Cymru,
Fieldl Arau, Dolgellau, Gwynedd LL40 1LW
Tel: 01341 423456

A wide range of birds, such as yellowhammers and twits, feed on grass and flower seeds throughout the year. Taller vegetation height with a lower grazing pressure that allows grasses and flowers to set seed are preferred by these species.

The timing of mechanical operations can make the difference between nest success and failure.

Advisory sheets for the bird species mentioned are available from the RSPB.

Supported by:

Countryside Council for Wales
Maws y Flynnen, Penhosagwyddel, Bangor, Gwynedd LL57 2DW
Tel: 01248 385500

Farming and Wildlife Advisory Group Cymru, Fieldl Arau, Dolgellau, Gwynedd LL40 1LW
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The RSPB North Wales Office, Maws y Flynnen, Penhosagwyddel, Bangor, Gwynedd LL57 2DW
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Dave Lamacraft (RSPB)

Andy Hay (rspb-images.com)
How can I manage grassland to benefit birds?

Grazed pasture

Nesting habitat

Birds that nest in grassland have strong preferences for certain sward structures. Grazing is vital for creating the nesting habitat of birds needing short or structurally diverse grassland, such as lapwings and curlews. Grazing levels need to be manipulated to maintain the desired sward structure through the breeding season. Lapwings require a tussocky, hoof-printed sward of 5 cm or less, whereas curlews prefer a taller, tussocky sward of 15 cm that provides camouflage. Both species need an open landscape and damp ground, and lapwings in particular will benefit from access to standing water. Leaving damp hollows uncultivated will provide cover for chicks.

Feeding habitat – soil and surface-active insects

Birds such as lapwings, starlings, choughs and ring ouzels that feed on earthworms, leafhoppers and other soil invertebrates prefer short-grazed grassland of 5 cm or less. Two things are important here – managing the grassland to promote a good population of soil invertebrates and grazing to enable access to the soil surface for feeding birds.

The following will promote soil invertebrate populations:

- Use of farmland manure; earthworms are prevalent in areas where manure has been applied in the previous season. Solid farmland manure is particularly beneficial as it takes longer to break down and increases soil organic matter.
- Avoid frequent ploughing and reseeding. After cultivations, earthworms take up to four years to recover to levels found in permanent pasture.
- Avoid treatment of stock with anthelmintics at the base of hedgerows, where a much wider range of plants can often be found. Plants begin to disappear at the lowest levels of artificial nitrogen application (25 kg N/ha/year).
- Maintain pasture structure.

Feeding habitat – seeds, insects and small mammals

A wide range of birds, such as yellowhammers and twites, feed on grass and flower seeds throughout the year. Taller vegetation height with a lower grazing pressure that allows grasses and flowers to set seed are preferred by these species.

The chicks of many of these species are dependent on insect food, with larger insects, such as grasshoppers, preferred. Taller vegetation and long-lived tussocks allow larger insects to complete their lifecycles and over-winter.

HAY AND SILAGE MEADOWS

Nesting habitat

Birds that require tall cover to nest in are attracted to fields turned out for fodder conservation. They then need sufficient time for incubation and chicks to fledge before mowing. Hay fields generally provide more opportunities due to harvesting vegetation at a more mature growth stage, but less extensively managed silage or haylage can also allow sufficient time if managed appropriately.

When the grass harvest is spread out, it provides a succession of opportunities for nesting and feeding birds. Species such as the skylark are more likely to fledge several broods if periods of seven weeks are allowed between cuts, and curlews will have greater opportunity to breed successfully if meadows are cut after mid-July.

Feeding habitat – seeds and insects

Opportunities for seed-eaters are greatest in meadows containing a diversity of plants. Those that contain dandelions and sedums are particularly good for seed-eating birds. Leaving uncultivated margins and corners in mown fields extends the availability of seeds, provides a habitat for insects and can create habitat for small mammals, which are in turn hunted by barn owls and kestrels. Some aftermath grazing of these areas will be beneficial, but avoid grazing out the tussocky structure.

Mechanical operations

Mechanical operations on grassland, such as muck spreading, rolling, hedging and harrowing, can be particularly damaging to ground-nesting birds in the spring. Whenever possible, avoid carrying out these operations in the breeding season (April-July) in fields with breeding birds.

HEDGERTOWNS

Grazing

Tussocky grass bases and margins to hedgerows are beneficial for a range of species, providing nesting and feeding habitat. Grazing of hedge bases will reduce the value of the hedge to wildlife, as well as thicken the health of the hedge itself.

Nitrogen

It is important to keep artificial fertilisers away from the base of hedgerows, where a much wider range of plants can often be found. Plants begin to disappear at the lowest levels of artificial nitrogen application (25 kg N/ha/year).

Unimproved semi-natural grassland

Semi-natural grasslands retain most of the plants that would occur naturally, but their composition and structure has developed under traditional, low-intensity farming. Such grasslands often possess a great diversity of plants, insects and other wildlife. It can be particularly difficult trying to re-create semi-natural grasslands on improved and semi-improved grasslands, making this maintenance of remaining areas particularly important.

You can get further information on this and other ways of managing your farm for wildlife from:

The Adviser Officer, The RSPB North Wales Office, Maes y Ffynnon, Penrhosgarnedd, Bangor, Gwynedd LL57 2DW Tel: 01248 363800

Countryside Council for Wales, The RSPB North Wales Office, Maes y Ffynnon, Penrhosgarnedd, Bangor, Gwynedd LL57 2DW Tel: 01248 363800

Farming and Wildlife Advisory Group Cymru, Ffordd Arran, Dolgellau, Gwynedd LL40 1LG Tel: 01341 423456

Supported by:

RSPB

Grasslands can provide nesting and feeding habitats for a wide range of birds, including lapwings. Welsh grasslands vary enormously according to physical characteristics and management, and consequently provide nesting and feeding habitat for a wide range of important bird species such as lapwings, curlews, yellowhammers, ring ouzels, starlings and choughs. Different species have different preferences, such as certain levels of soil wetness or sward heights, depending on how they feed and how they avoid predators. The grassland management on farms significantly determines the availability of particular feeding and nesting resources.

Benefits for wildlife

Grazed pastures

Grazed pastures, depending on their physical characteristics and grazing management, provide nesting habitat for ground-nesting birds such as the lapwing and curlew, and feeding habitat for species such as the chough and starling. The grazing regime is fundamental to providing the right conditions for different species.

Hay and silage meadows

Birds that require tall cover to nest in, such as curlews and skylarks, can find suitable nesting habitat in fields turned out for fodder conservation. Hay meadows are more likely to allow plants to flower and seed, providing seed and insect food for birds such as the yellowhammer, linnet and twite. Hay meadows are also more likely to provide the structure required for nesting by cuttwits. Sligo fields have lower wildlife value, but small modifications in management can significantly increase their value to birds.