Grazed pasture is used for nesting and feeding by a great variety of birds. Livestock management has a major influence on the wildlife interest of grassland. The timing and intensity of grazing determines the structure and plant composition of the sward, which in turn influences insect numbers and bird usage. Birds have strong preferences for certain sward structures, depending on how they feed and how they avoid predators, so grazing management determines the relative abundance of particular nesting and feeding habitats in the countryside.

**BENEFITS FOR WILDLIFE**

**Grazed pastures are a rich source of invertebrates (earthworms, insects, etc) for birds**

Birds such as starlings and thrushes take invertebrates from the soil, while buntings, sparrows and larks take insects from within the vegetation to rear chicks through the summer and swallows catch insects flying above the sward. Bare patches and short vegetation created by grazing livestock benefit numerous birds by providing easy access to food. Invertebrates associated with the breakdown of dung, such as flies and beetles, are important food for many birds and bats.

**Several ground-nesting birds need grazing to create suitable nesting habitat**

Birds that nest in short or structurally diverse grassland, such as lapwings and snipe, need grazing to provide suitable nesting habitat.

**Unimproved grassland holds rare communities of plants and insects**

Grasslands that are the product of traditional, low intensity farming often support a rich variety of grasses, flowers and insects. Such areas are now a rare and irreplaceable habitat.
HOW CAN I MANAGE GRAZING TO BENEFIT WILDLIFE?

- Birds have strong preferences for particular sward structures, so appropriate management is essential to benefit any particular bird species.
- The location and type of grassland is critical when considering the requirements of some birds. Species such as snipe and redshanks require wet grasslands, while others such as wheatears and whinchat use dry grasslands. Large open fields are preferred by some species eg skylarks, while others prefer mosaics of grassland, shrubs and trees.
- Swards that vary a lot in height provide suitable habitat for many birds. While grazing with cattle can create ideal habitat, grazing management rather than livestock type has the greatest influence.

**HLS Nesting habitat**

- For ground-nesting birds, grazing needs to be manipulated to create their desired sward structure through the breeding season. Habitat requirements of individual birds are detailed in additional species advisory sheets.
- The grazing levels required to achieve the desired sward structure will vary with season and location.
- Improved pastures provide limited nesting habitat owing to the high productivity of the sward, although lapwings and skylarks may use them in certain circumstances.
- Wherever possible, mechanical operations (eg muck spreading, harrowing, topping) should be timed before or after the breeding season in fields with ground-nesting birds.

The critical breeding period for different birds is detailed in species advisory sheets.

**Feeding habitat**

- Birds that feed on soil invertebrates (eg earthworms, leatherjackets), such as thrushes, starlings and corvids, prefer short swards with bare ground so that they can detect food and predators more easily.
- Birds that feed on seeds and invertebrates in the vegetation (eg grasshoppers, spiders, beetles), such as buntings, finches, sparrows and larks, prefer grassland with areas of taller vegetation as these are more likely to contain plants that have gone to seed and larger insects. The latter require grazing regimes that allow some taller vegetation to be present long enough for them to complete their life cycles and over-winter.
- Feeding out-wintered livestock with feedstuffs such as seed-rich hay and cereal grains provides important food for over-wintering seedeaters such as yellowhammers.
- A number of veterinary medicines used to control internal worms and other parasites affecting farm livestock contain the active ingredient avermectin. Stock treated with these products excrete residues for up to several weeks, adversely affecting invertebrates associated with the degradation of dung. Management should aim to maximise the availability of avermectin-free dung by:
  - treating livestock only when necessary.
  - The need to treat livestock for some internal parasites can be reduced through management such as mixed grazing systems, taking faecal egg counts, avoiding overstocking areas, and through the judicious use of clean grazing.
  - treating livestock with an appropriate non-avermectin product or moxidectin (a less toxic avermectin).
  - restricting the use of products containing doramectin, ivermectin or eprinomectin to housing of the livestock or in the autumn.

**HLS OELS Pasutures of high wildlife value**

- These areas support scarce species of plants, birds or insect, and are usually areas that have undergone little or no agricultural improvement. Such areas, even if small, should be valued and the management practices that have created them continued.
- Although unimproved pastures have lower productivity per hectare than agriculturally improved grassland, some can be very high quality, with high individual livestock performance. Pastures of lower herbage quality can still play a positive role in the livestock system by grazing with stock at a stage of lower nutritional requirement.
- It can be difficult trying to increase plant diversity on agriculturally improved and semi-improved grassland. Suitable sites and management need to be carefully chosen, and advice should be sought.