

Grassland for plants and animals



This illustrated guide has been designed to help show you what wildlife needs in terms of grassland structure and condition.

**SCOTTISH
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Grassland for plants and animals

April

Watch out for . . .

- Early flowers such as celandine and anemone.
- Birds such as skylark singing to proclaim their breeding territories.
- Invertebrates emerging from hibernation and seeking nectar and pollen from early flowers.

Livestock

Sheep will selectively graze the flower heads. If possible, it is best to use other stock early in the season.

Ideal structure

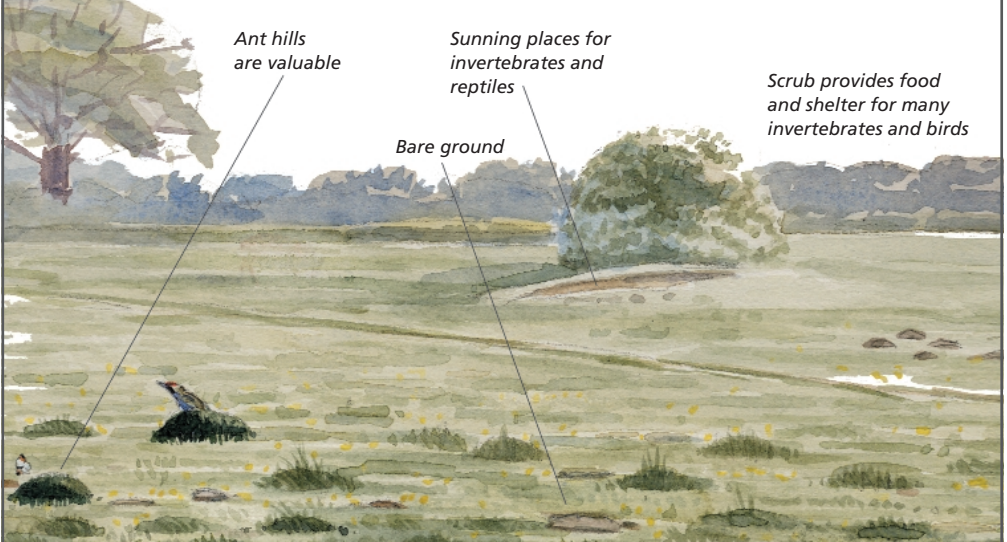
Most of the field should look like this.

Aim for:

- a mix of relatively short turf with little open patches for invertebrates
- plenty of wild flowers
- a scatter of small clumps giving cover for invertebrates
- grass growth that is not enough to swamp the small plants.



Queen bumble bee searching for nest site in tussock.



Scattered taller clumps or tussocks – up to 20%

Medium height sward

Scattered scrub – no more than 5%

Scattered bare ground – less than 10%

Grassland for plants and animals

April

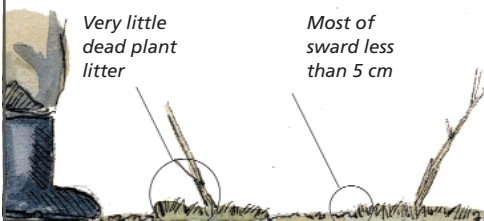
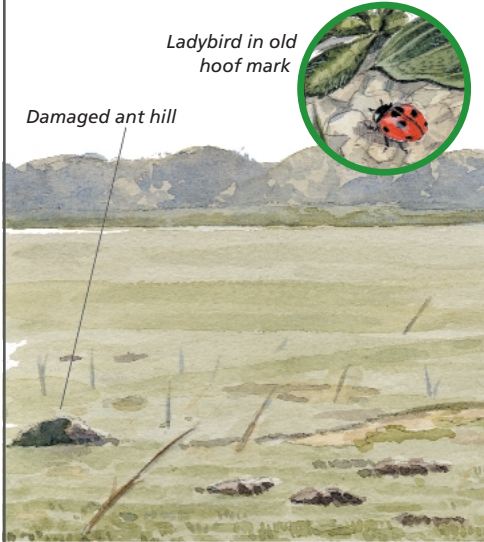
Bare ground

Last winter's hoof marks provide germination niches for plants and sunning spots for invertebrates. Up to 5% bare ground, in hoof-sized patches scattered throughout the site, is helpful for wildlife.

Too short

Only small areas of the field should look like this:

- sward too tightly grazed to allow spring flowers to bloom so there is no nectar for insects
- little or no cover for invertebrates.
- bare ground encourages germination of annual plants including notifiable weeds.



Bare ground – more than 5%

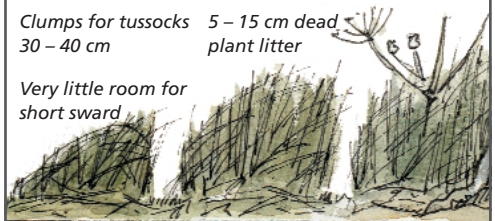
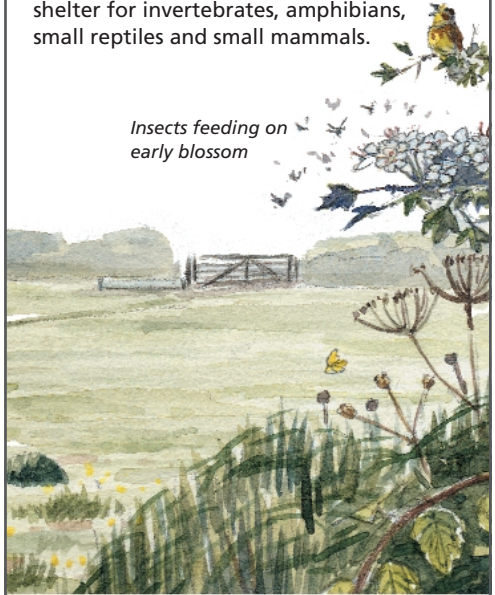
Clumps or tussocks – less than 10%

Short sward – more than 85%

Too rank for main area of field

Apart from a 1–3 m fringe around boundaries and scrub, only very small areas should be this long:

- long rank grass smothers smaller herbs
- taller grass and wild flowers around field margins provide important food and shelter for invertebrates, amphibians, small reptiles and small mammals.



Short sward – less than 50%

Clumps or tussocks – more than 40%

Grassland for plants and animals

June and July

Watch out for . . .

- Many wildflowers and grasses in full flower.
- Grasses at their maximum height.
- Invertebrates feeding and breeding.
- Skylark and other ground-nesting birds rearing young.

Ideal structure

Most of the field should look like this.

Aim for:

- plenty of plants in flowers
- a varied structure of relatively short swards
- small open patches for invertebrates that need bare ground
- cover and nectar for invertebrates
- grass growth that does not swamp small plants.



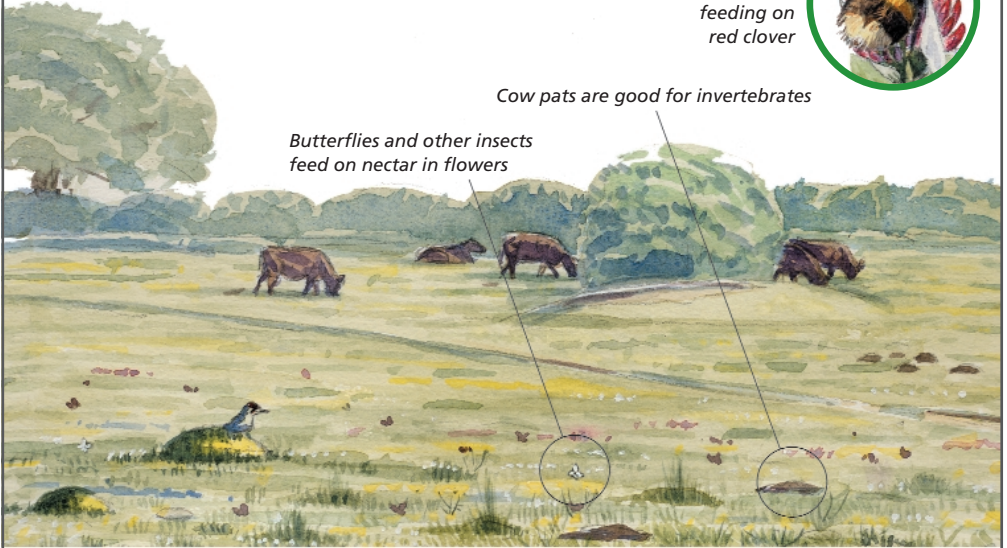
*Violet ground beetle
hunting on bare ground*



*Bumble bee
feeding on
red clover*

Cow pats are good for invertebrates

*Butterflies and other insects
feed on nectar in flowers*



*Little dead
plant litter*



*Scattered bare ground –
2–5%*

*Scattered clumps or
tussocks
15–20 cm (being
grazed down)*



*Clumps or tussocks –
up to 20%*

*Few small seedlings of
shrubs such as hawthorn*



*Mature shrubs –
less than 5% cover*

Majority of sward

Grassland for plants and animals

June and July

Bare ground

Invertebrates mate, catch prey and sun themselves in the scattered hoof marks from last autumn. These gaps will be gradually covered over by germinating seeds and growth of neighbouring plants.

Too short

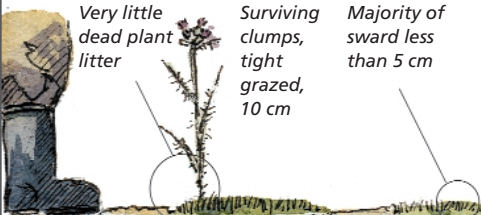
Only small areas of the field should look like this:

- few flowers so little nectar for insects
- bare ground encourages germination of annual plants including notifiable weeds
- little or no cover for invertebrates, particularly if the field margins have been grazed out.



Assassin fly on hogweed

Thistle and ragwort due to heavy winter poaching



Scattered bare ground – more than 5%

Clumps or tussocks – less than 5%

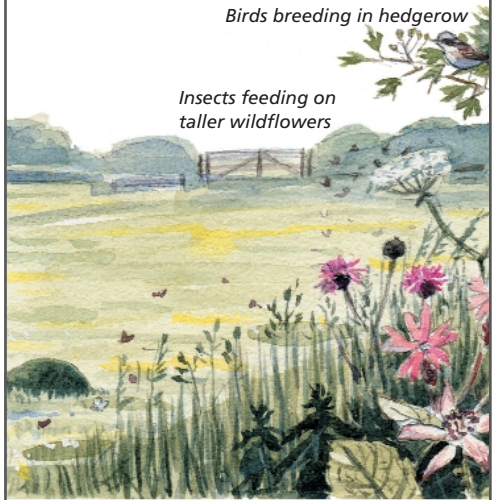
Short sward – more than 85%

Too rank for main area of field

Apart from a 1–3 m fringe around boundaries and scrub only very small areas should be this long:

- smaller wildflowers smothered by grass growth
- no open bare ground for invertebrates to feed or breed
- taller field margins provide important food and shelter for invertebrates, amphibians and small mammals.

Birds breeding in hedgerow



Insects feeding on taller wildflowers



Clumps for tussocks 30–40 cm

5–15 cm dead plant litter

Very little room for short sward

Tussocks – more than 40%

Scrub – may be more than 5%

Grassland for plants and animals

October onwards

Watch out for . . .

- Invertebrates hibernating in dormant and dead plant material.
- Flocks of redwings and fieldfare feeding on earthworms in the grassland.
- Finches eating the seed of tall plants.

Wet areas

Areas of standing water and damp ground are crucial for many different animal and plant species. These should not be drained.

Ideal structure

Most of the field should look like this.
When you remove stock for winter aim for:

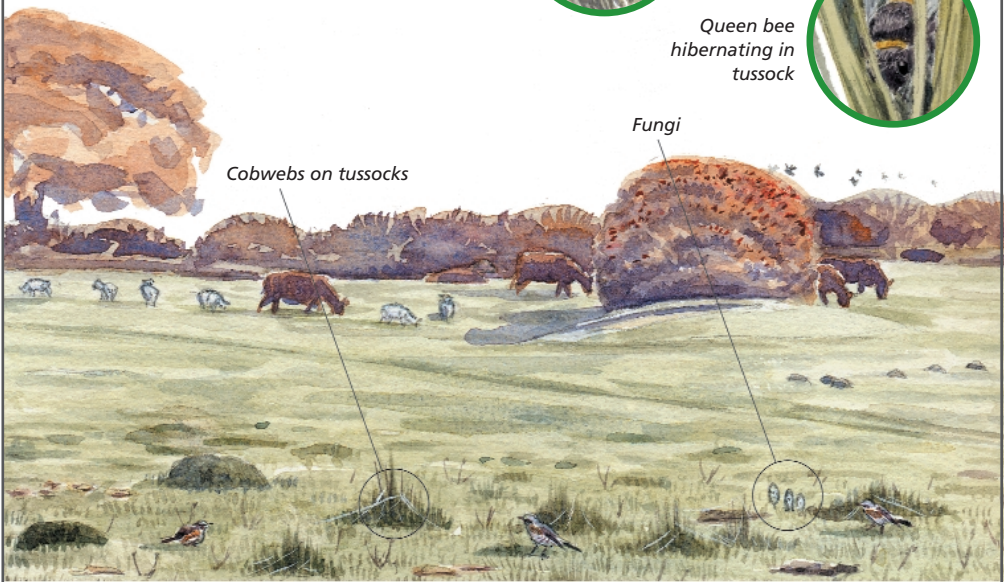
- a scattering of tussocks to provide places for invertebrate or small mammals to overwinter
- a sward that will not swamp the growth of wildflowers in spring.



Hunting barn owl



Queen bee hibernating in tussock



Cobwebs on tussocks

Fungi

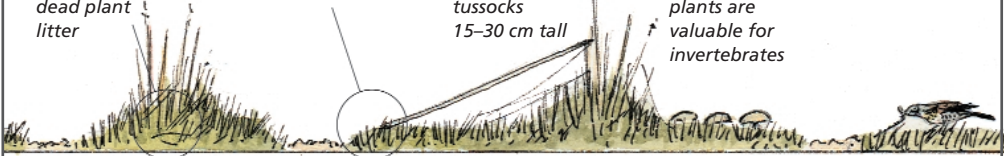
Patchy, thin (1 cm max.) dead plant litter

Most of sward

Scattered clumps or tussocks 15–30 cm tall

Dead flower stems of taller plants are valuable for invertebrates

Few, if any, shrub seedlings/saplings



Scattered tussocks - 20–30%

Scattered bare hoof marks – up to 5%

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October onwards

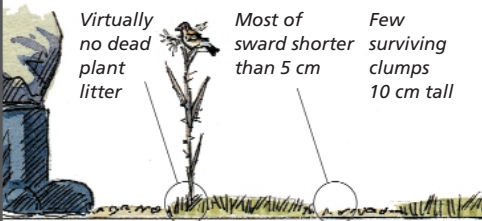
Hoof prints

Scattered hoof marks create valuable small gaps in the sward. In spring these will provide germination gaps for plants, and open patches where invertebrates can sun themselves, hunt for food and find mates.

Too short

Only small areas of the field should look like this:

- no cover for invertebrates, amphibians and reptiles or small mammals to overwinter
- may be used by lapwing or golden plover for feeding or roosting and by fieldfare and redwing for feeding.



Bare ground – more than 5%

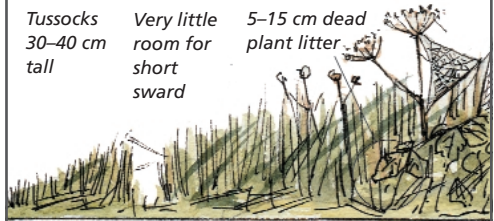
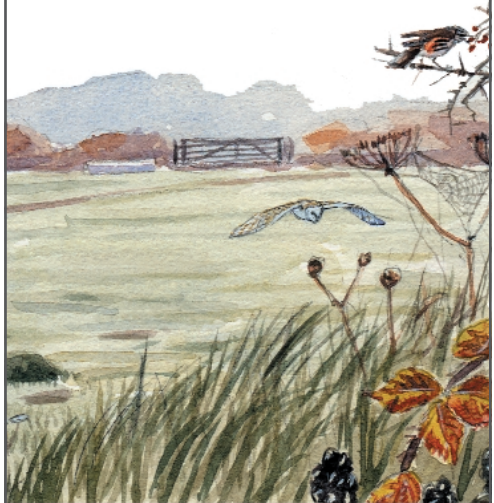
Short sward – more than 85%

Clumps or tussocks – less than 5%

Too rank for main area of field

Apart from a 1–3 m fringe around boundaries and scrub only very small areas should be this long:

- tall vegetation provides vital places for invertebrates, small mammals and amphibians to hibernate
- rank sward will swamp smaller wildflowers the following spring.



Clumps or tussocks – more than 40%

Scrub – may be more than 5%

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Authors and contributors

This guidance has been developed by Defra from the "Illustrated guide to grassland condition – neutral grassland for plants and animals", produced by English Nature and the consultants, TellTale.

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