

Fact sheet 2

Providing nesting cover for wild grey partridges

Grey partridges form pairs in late winter following the break-up of their winter covey. Pair formation usually depends on the weather and during cold weather in late winter a 'covey' can reform for a short while. In some years, pairs form as early as mid-January. The birds are always monogamous and in the spring the hen seeks out suitable cover in which to nest.

The nest is made on the ground and is usually a scrape lined with grasses. Such scrapes can be found before the end of March. The first eggs are laid a few weeks later. The incubation of first clutches can begin as

early as the end of April, although mid-May is usual for most hens. Hens lay between 10 and 20 eggs (average 15 eggs per clutch) at one to two-day intervals. No other wild bird lays more eggs than a grey partridge! Incubation takes 23-25 days and the chicks leave the nest within hours of hatching.

The hen is on her nest for between 38 and 55 days. At this time she is vulnerable to a range of predators and to the nest being flooded during heavy rain. The choice of a good nest site is vital if she is to survive this crucial period and hatch off her chicks.

The Game & Wildlife Conservation Trust

For over 75 years our scientists have been researching why species like the grey partridge, water vole, corn bunting and black grouse have declined. We are continually developing practical measures to reverse these declines.

Our aim is simple - a thriving countryside rich in game and other wildlife.

We are an independent charity reliant on voluntary donations and the support of people who care about the survival of our natural heritage.

What do grey partridge hens look for?

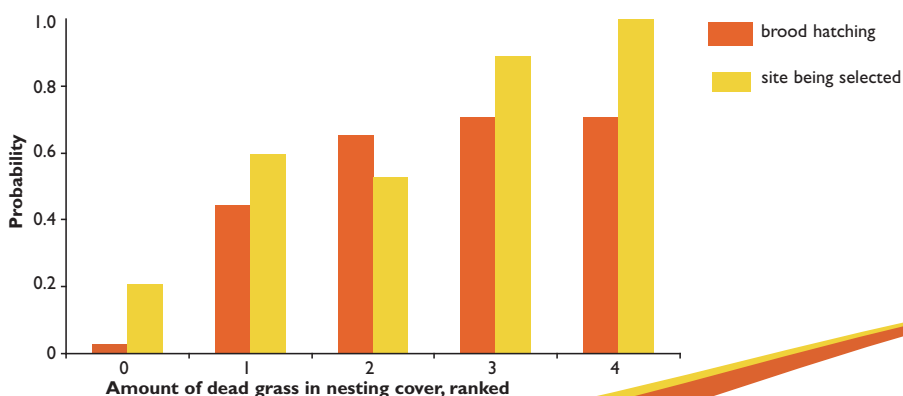
Hens nest in thick grassy cover, typically found at the base of a field boundary (hedgerow, fence line, etc), on low banks or in the crops themselves, particularly when suitable non-crop sites are not available. Research has shown that the two crucial elements of a successful nest site are the amount of residual dead grass present and the height of the nest above the general field level. In wet weather, nests on banks drain more freely and are less likely to become water-logged. Water-logged nests are abandoned and the eggs chill quickly

and die. Many nest sites are therefore on south-facing slopes or banks, on free-draining soils sheltered from the prevailing wet weather. Research has shown that sites on a bank and surrounded by dead grass are more likely to be selected for nesting, and that these nests are less likely to be predated and more likely to hatch a brood than sites or nests on level ground (Figure 1). Hedges with more than 10 trees per kilometre of hedge are avoided because they contain too many look-out posts for birds of prey, crows and magpies.

Why should you read this fact sheet?

This series of fact sheets explains how to restore grey partridges on your farm, based on the results of our practical research. Restoring these birds on farmland will help us to achieve Biodiversity Action Plan (BAP) targets for this and other BAP species, including other ground-nesting birds and rare arable wildflowers. It will also allow you to achieve the best out of your wild gamebirds.

Figure 1 The effect of dead grass on the probability of a random site being selected for nesting, and on the probability of a clutch avoiding predation.



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Creating nest cover for grey partridges

If you still have strips of perennial grassy cover at the edges of fields (up to two metres wide ideally), please look after them. This can be done by regular maintenance and following the advice below on dos and don'ts, many of which are part of cross-compliance.

Avoid regular annual cutting of grassy margins to allow the correct grass structure to develop. Rotational trimming every two or three years may be necessary to avoid scrub encroachment, especially if blackthorn is present, but always leave some margins uncut in any given year across the farm.

Strive to maintain the competitive, perennial, non-invasive grasses eg. cock's-foot, and keep out weeds such as cleavers and barren brome.

Do

- Keep all agrochemicals in the field.
- Fence livestock out of hedge bottoms.
- Keep the plough at least one metre away from the edge of the hedge.
- Create a hedge cutting plan.

Don't

- Spray herbicides into hedge bottoms.
- Let herbicides drift into hedge bottoms.
- Misplice fertiliser so it is dumped into hedge bottoms.
- Plough so close to the hedge that the grass strip disappears.
- Let livestock graze hedge bottoms.

- Cut the hedge so it grows out and shades out the grassy bottom.
- Cut the perennial grassy cover at the base of your margins every year.

If you have lost these grassy strips and you want them back, consider the following:

- Sow them (at least one metre wide) next to field boundaries and short thick hedgerows.
- Use a high proportion of tussocky perennial grasses, such as cock's-foot.
- Newly sown strips should be cut up to three times in year one to discourage weeds, but thereafter only every three years to allow the tussocks to form.

These grassy strips can be created as either two, four or six metre strips under Entry Level Stewardship (ELS) and Higher Level Stewardship (HLS) in England. In Scotland, a number of options with the potential to help grey partridges exist within the Scottish Rural Development Programme (SRDP) Tier III, and within SRDP Tier II land management options. For specific advice, please consult your local advisor (see details below).

Beetle banks. These are raised grass strips sown across (not around) arable fields. Raise up a bank across the centre of large fields (more than 16 hectares) by ploughing in a furrow from each direction

and sow it with a perennial tussocky grass mixture. Do not connect the beetle bank to the existing field boundaries at either end because this will encourage predators to patrol along the edge of your beetle bank. Establishing and managing beetle banks is the same as for a grass margin. As beetle banks, these strips are grant-aided under both ELS and HLS in England, and the SRDP in Scotland.

How much nesting cover is needed?

To stabilise the population of wild grey partridges (ie. to achieve the first BAP target of halting the decline) without predator control, you will need 4.3 kilometres of nesting cover per square kilometre of farm (seven miles/square mile or four miles/1,000 acres).

To recover the population to the 2010 BAP target (90,000 pairs in the UK) without predator control, you will need 6.9 kilometres of nesting cover per square kilometre of farm (11 miles/square mile or seven miles/1,000 acres) to achieve this target. You also need 5% of your arable area to be managed as insect-rich brood-rearing habitat (conservation headlands, wild bird seed mixes, wild bird cover on set-aside, etc (see Fact sheet 3)). Remember to try and site your nesting cover close to some insect-rich brood-rearing cover to maximise the benefits from both.

Good nesting cover



More information

The Game & Wildlife Conservation Trust's Advisory Service can provide further advice on feeding systems for gamebirds, and on all aspects of game management. For information, please contact 01425 651013.

