

Increasing the value of hedges for wildlife with relaxed cutting regimes

Why is hedgerow management important?

- Hedges provide key semi-natural habitat and resources for wildlife in agricultural landscapes, and support pest control and pollination of crops.
- Most hedges are cut with a mechanical flail, often every year in early autumn.
- Cutting regimes substantially alter the condition of hedges and their value as wildlife habitats. For example, farmland birds and mammals rely on berries as a food source over winter, but most hedgerow species only flower and fruit on wood that is at least two years old.
- We tested cutting regimes (the frequency, timing and intensity of hedgerow trimming) on five farms across southern England over three years. Here are our key findings ~~so far~~.

Frequency and timing of hedgerow cutting

Cutting once every 3 years compared with every year:

- 1.5 - 2 times more hawthorn and blackthorn flowers are produced.
- The increased flower abundance attracts more pollinating insects such as hoverflies, bees and butterflies.
- More hawthorn, blackthorn and black berries are provided for overwintering wildlife (e.g. farmland birds and small mammals), especially if hedges are cut in late winter.
- More butterfly and moth (Lepidoptera) caterpillars and pupae.

Cutting once every 2 years compared with every year:

- Timing of cutting is important. On hedges where there was an increase in berries from cutting every two years as opposed to every year, this was only found for cutting in late winter (and not in autumn).
- There were more butterflies and moths if hedges were cut in late winter every 2 years, but not in autumn.
- Fewer benefits than cutting once every 3 years. For example, increase in berry provision found at some sites on hedges cut once in 2 years, but not at all sites.



Berries on two years growth on a hawthorn hedge (left) and the same hedge after cutting in autumn (right).

Intensity of hedgerow cutting

- Hedge trimming in late winter may not be possible on wet ground where access is difficult. An alternative is to reduce the intensity of trimming in early autumn.
- We tested reducing the intensity of hedge trimming by cutting around 10cm higher and wider than the previous cut. This allows hedges to grow up and out incrementally.

A reduced cutting intensity compared with cutting back to the same height and width results in:

- 2-3 times more berries for overwintering wildlife on hawthorn and blackthorn.
- Increased diversity of butterfly and moth species.



Incremental trimming retains some leaves and berries in autumn.

Standard cut in autumn removes foliage and berries.

Hedgerow management summary

- Our results show strong evidence of benefits for wildlife of reducing the frequency of hedgerow trimming to once every three years, compared with the standard practice of trimming every year.
- Cutting once every two years had weaker benefits for wildlife, and timing was critical, as little advantage was found for trimming once every two years in autumn.
- Relaxing the intensity of trimming to allow incremental growth also delivered substantial benefits for wildlife, and is a practical option where access to hedges is difficult in late winter.
- This evidence supports the more relaxed cutting regimes which are available under Agri-Environment Schemes in England.

- Across the most common types of hedgerow, these relaxed management regimes provide multiple benefits to wildlife.



Photos: Marc Botham, CEH

Left: The Chestnut moth and right: a Brown hairstreak butterfly (a Biodiversity Action Plan priority species), examples of the many insects who feed on hedgerows.