Hedgerows may support up to 80% of our woodland birds, 50% of our mammals and 30% of our butterflies. The ditches and banks associated with hedgerows provide habitat for frogs, toads, newts and reptiles.

In areas with few woods, many species of birds depend on hedgerows for their survival. At least 30 species nest in hedgerows. Many of these, such as bullfinches



and turtle doves, prefer hedgerows over 4m tall, with lots of trees, whereas whitethroats, linnets and yellowhammers favour shorter hedgerows (2-3m) with fewer trees. Dunnocks, lesser whitethroats and willow warblers prefer medium or tall hedgerows with few trees. Wrens, robins, dunnocks and whitethroats usually nest low down but song thrushes, blackbirds, chaffinches and greenfinches nest well above the ground level. Grey partridges use grass cover at the hedge bottom to nest. It is therefore very important to manage for a range of hedge heights and tree densities and to maintain a grassy verge at the base of the hedge.

Grassy hedge bottoms and field margins provide nesting material and insect food. Wild flowers and grasses growing up into a hedge also help to conceal nests from predators. In winter, hedgerows can be feeding and roosting sites for resident birds and winter visitors such as fieldfares and redwings.

Which hedgerows are best for wildlife?

Thick hedges with wide bases that provide plenty of cover are best but there should be a variety of shapes and sizes – from shaped hedgerows to lines of trees. Hedgerows with large numbers of woody species hold more birds. Trees, particularly oaks, support a rich variety of insects and are good song posts. Old trees have holes where blue tits, owls and kestrels, as well as bats, can nest. Dead timber is also a rich source of insect food and should be left in the hedge unless it is unsafe. The greater the variety of shrubs and trees, the better. Different species flower at different times, providing nectar over a longer period, and so will support more insects. They will also supply a variety of berries over a long period.

The law and hedgerows

Nesting birds: It is an offence under Section 1 of the Wildlife and Countryside Act of 1981 (as amended by CROW Act 2000), the Northern Ireland Wildlife Order of 1985, and the Isle of Man Wildlife Act 1990 intentionally to take, damage or destroy the nest of any wild bird while it is in use or being built. It will be an intentional act, for example, if contractors cut or remove a hedge even though they are aware that birds are nesting there. There is no offence, however, if it can be shown that the act was the incidental result of a lawful operation and could not reasonably have been avoided, or if the person was genuinely unaware of the presence of the nest. Since hedge cutting can be carried out outside the breeding season, this defence is rarely applicable in practice. If a Schedule 1 species, such as a cirl bunting or a hobby, is nesting in the hedge, even intentional or reckless disturbance close to the nest is an offence. Disturbance would be considered a reckless act if the contractors had knowledge that a particular Schedule 1 species had nested in the location in the past and they had not made sufficient licensed checks to ascertain residence of the species before starting work. It is always best to comply with the best practice in hedge cutting, thereby avoiding the nesting season and conflict with the wildlife law.



A cross-section through an 'A'-shaped hedge, with wild flowers and grass growing at the base. A tree has been tagged to tell the flail operator not to cut it.

Hedgerows: Hedgerow regulations came into force in England and Wales in 1997. (Although this law does not apply in Scotland or Northern Ireland, the Agricultural Environmental Impact Assessment protects some hedges there.) It is against the law to remove most hedges without permission from the local planning authority, which, on application, must decide whether the hedgerow is 'important' or not. To qualify as important, the hedgerow must be at least 30 years old and at least 20 metres long (shorter

hedges are included if they are linked to a hedgerow network) and meet at least one of eight criteria. These identify hedgerows of particular archaeological, historical, wildlife or landscape value. If the local planning authority decides to prohibit the removal of an important hedgerow, it must let the land manager know within six weeks. If the hedge is removed without permission (whether important or not) the land manager may face an unlimited fine and may have to replace the hedge. Research from 1999 suggests that 70% of hedgerows may have protection against removal under the current regulations.

The hedge does not have to contain trees but any trees in it form part of the hedgerow. Where a hedge has grown to a line of trees it is not covered by the regulations. Lines of trees may be protected under licensing procedures for tree felling or by Tree Preservation Orders.

Some hedgerows have to be maintained in perpetuity under the original Enclosure Act. Each parish has an Enclosures Map, so to find out which hedgerows are protected by the Act, contact your parish council or public records office.

Farmers and hedgerow management

Benefits of a hedgerow: They provide shelter for stock and crops and cut down wind speed, which prevents erosion. Hedges are good for game, providing corridors for pheasants to disperse around farms. Hedgerows can help control insect pests as predatory insects overwinter in them and move into the crops in spring when aphid numbers start to increase. Hedgerows can act as barriers to windborne pests, and shelter pollinating insects, particularly bumblebees, which need hedge banks. A rough grass verge alongside a hedge is also good winter habitat for predatory insects and, if left uncut overwinter, will provide nesting cover for partridges.

Practical problems: Hedge trimming requires a special machine and a skilled worker, so hedgerow management is expensive. Other problems include getting onto the land when the ground is wet and preventing obstruction (road traffic, farm machines). Hedgerows can shelter pests, such as rabbits, which can damage crops. Shading of the crop may cause uneven ripening and disease. Dutch Elm Disease causes management problems, too. Where trees die, suckers grow. These then die off leaving a gappy hedge.

Managing hedgerows: Trimming will keep hedgerows in good condition for many years, but from time to time they may need major restoration through laying or coppicing. Local tradition plays a strong part in management methods, but the type of farming is probably the over-riding factor.

 Where stock is kept, a stock-proof boundary is needed so the hedge is generally trimmed to keep it to a fairly neat shape and a height that will shelter stock (raise wind just higher than their backs). Laying is carried out when major maintenance is needed.

A laid hedge



• Where no stock is kept (all arable), hedgerows will be trimmed to prevent shading of crops and prevent farm machines being obstructed, but where shading is not an issue, a hedge can be allowed to grow taller, or a 'linear wood' may be allowed to develop (no trimming off top). Major management to rejuvenate growth is coppicing (every 20 years or more). This is a long tradition in many areas of the country. Coppicing can look disastrous, but is good for re-invigorating growth, and is recommended where hedgerows have become infested with elm suckers.

A coppiced hedge



Immediately after coppicing (winter

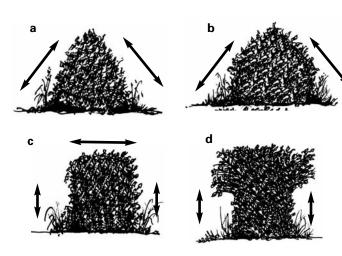
First year re-growth

Second year regrowth (can be lightly trimmed)

Maintenance: The Farming and Wildlife Advisory Group (FWAG) advocates cutting of hedgerows only in alternate years. This is better for the wildlife, and it cuts down on time and expense for the farmer. Some species only flower on second year growth, so annual cutting reduces the flowering and subsequent berry crop. Hedgerows along roads and farm access tracks may have to be trimmed annually to avoid obstruction. Young hedgerows (newly planted, coppiced or laid) also need a light annual trim for about 10 years in order to 'train' them into a good shape.

Hedgerow maintenance is usually done by flail trimming. The flail has made it possible to trim hedgerows at low cost. Modern labour costs would make trimming by hand prohibitively expensive, so without the flail trimmer, many more farmers may have been forced to remove hedgerows. If used with care, the flail trimmer is an excellent hedge-trimming tool, although it is only designed to cut through material up to a maximum of 2cm thick. When it is used on thicker stems the result is ragged, split stems. While this looks terrible, most healthy hedgerows are able to survive and recover. This misuse of the flail trimmer, however, leaves the shrubs very vulnerable to attack by fungal diseases, particularly if the flail is used annually. A tractor-mounted circular saw should be used where thicker growth needs to be cut.

Wide hedgerows are of particular wildlife benefit. Existing hedgerows can be allowed to widen by cutting a little further out than the previous cut. This also strengthens the hedgerow shrubs. Where a hedge has become over-mature and is losing vigour, coppicing or laying should be considered. If a hedge becomes a line of trees, it can be very difficult to return it to a shaped hedge. Laying or coppicing may become difficult and so much vigour may be lost that the hedge may not regrow.



Hedges can be trimmed successfully with a flail trimmer to a variety of shapes, as shown in these cross-section drawings:

- a 'A'-shaped (minimum two cuts)
- b Chamfered (minimum four cuts)
- c Box-shaped (minimum three cuts)
- d Free growth (two sides only cut to allow flowering and fruiting every year)

What time of year to trim?

Never cut hedgerows during the nesting season (March to August). Hedge trimming is best left until the end of winter to leave the larder of fruits and nuts for wildlife. Sometimes it is not possible to get on the field at this time of the year, and on such occasions trimming can be brought forward to early winter. The most important consideration is to avoid such work during the breeding season. Retain ground cover at the base of the hedge over winter for ground-nesting birds such as partridges.

Constraints on hedgerow management and removal are incorporated into the Cross-compliance requirements attached to agricultural subsidies. Under these rules, hedgerow trimming is not permitted between 1 March – 31 July in England and Scotland, and between 1 March – 31 August in Wales and Northern Ireland. In addition, farmers in England must establish an uncultivated fertiliser and pesticide free buffer zone measuring 2m from the centre of a hedge for all fields above 2ha.

Where to get advice on hedge management and planting

Farmers: The RSPB and the Farming and Wildlife Advisory Group (tel: 024 7669 6699) can give advice on hedgerow planting and maintenance. Advice may also be available from your local authority. Some countryside areas may be in a Countryside Management Project and additional help is often available through these projects. ADAS and the Scottish Agricultural College also provide advice and literature. Check the business numbers in your local Telephone Directory.

Non-farmers (for gardens, paddocks and other non-agricultural land): Contact the RSPB, your County or Scottish Wildlife Trust, or your local authority. Check your Telephone Directory.

Hedgerows provide food and shelter for many species. Because they often link small woods, they are essential corridors along which wildlife can travel.

Value of hedgerows for wildlife

landscape and historical significance as long-established hedgerows. Some hedgerows are so important that no amount of planting could replace them. The government has brought in legislation to protect hedgerows of key importance in England and Wales.



These losses of managed hedges appear to have been halted in the mid-1990s. This is welcome news. Although the net length of hedges now appears stable or possibly increasing, however, it is important to remember that newly created or restored hedges do not have the same value in terms of wildlife,

Between 1990 and 1993 the removal of hedgerows lessened to about 3,600 km per year, and the rate of planting at 4,400 km per year exceeded the rate of removal. As a result of hedgerow incentive schemes, hedgerows and other boundary features. Unfortunately, there was a net decrease in hedgerow length of 18,000 km per annum in England and Wales during this period. This was at least partly due to lack of management, leading to hedges being reclassified as lines of trees or gappy shrubs. These relict hedgerows, although registered as lost in the survey, hedgerows, although registered as lost in the survey, are still of value to birds and other wildlife.

An Institute of Terrestrial Ecology (ITE) survey of hedgerow changes revealed that between 1984 and 1990 hedgerow length in England declined by 20% and in Wales by 25%. While outright removal of hedgerows accounted for 9,500 km per year, almost half of the loss was a result of lack of management.

Reasons for hedge loss include changes in farming practices, development, damage caused by straw and stubble burning (banned since 1992), spray drift, neglect and indiscriminate trimming.

farmland.

Since World War II, hedgerows have been removed at a much faster rate than they have been planted. In some parts of the country 50% of hedgerows have gone, while others are so badly managed that their value to wildlife is much reduced. Loss of hedgerows has been identified as a factor in the decline of many plant and animal species traditionally associated with plant and animal species traditionally associated with

Hedgerow loss/gain: the position

Planting of new hedgerows started around Roman times and continued on and off through to the midalmes and continued on and off through to the midalst State Spound the Enclosures Act prompted a great spurt in hedge planting, mostly around the English Midlands. Hedge removal is not a new phenomenon – many were lost during the Napoleonic Wars when a besieged Britain was threatened with starvation. After the Second World War, government policy encouraged hedge removal to ensure that policy encouraged hedge removal to ensure that was self-sufficient in food. Financial incentives were available to remove hedgerows and machinery was developed that could not manoeuvre in small fields. It is now widely recognised that this policy encouraged farmers to go too far, and there are grants encourage planting and protection of hedgerows.

feudal times as they could not be moved. hedgerows - they made great boundary markers in Pollarded trees are frequently found in ancient such as hazel, dogwood, guelder rose and spindle. the hedge itself may be a rich mixture of woody shrubs woodland plants such as bluebells and anemones, and wildlife. The sward on the verge or bank may contain living history and are often the best hedgerows for parish boundaries. They are irreplaceable pieces of our oldest hedgerows, and they are often on today's woodland were left to mark the boundaries - these are woodland to make fields. On occasions, strips of attack. The first Bronze Age farmers had to clear thorns and sharpened branches for protection from the only hedgerows were 'dead hedges', constructed of Before people farmed, they were hunter-gatherers and

History of hedgerows

Some landscapes were never hedged: for example the South Downs in West Sussex. A lack of hedgerows may not be the reason why there is not so much wildlife. It would be insensitive to local landscape character, and possibly detrimental to wildlife, to start planting hedgerows there.

Hedgerows vary regionally in shape and the species within them, and this affects the best way to manage them. For example, some contain very few species, such as the beech hedgerows of Exmoor (beech is very tolerant of exposure). Cornish 'hedges' are dry-stone walls and earth banks with bramble and shrubs growing out of them.

Wild flowers and grasses growing up at the base of a hedge help to conceal birds' nests from predators. They also shelter pollinating insects such as bumblebees.



indirect way.

Hedgerows are not 'natural'. Most have been planted, and if they were not managed, each shrub in the hedge would eventually become a mature tree, grow old and die just like woody plants in the garden. Many hedgerows now have no practical use, especially in parts of eastern England where farms are often purely arable. However, they are important landscape and arable features, and may benefit the farmer in an wildlife features, and may benefit the farmer in an

information.

Are you interested in the best way to manage farm hedgerows for wildlife? This leaflet aims to give a balanced view of the practicalities of looking after farm hedgerows, says a little about their history, and gives details about where to go for further advice and

Introduction

Grants for planting and restoration

(Unless otherwise stated, call Directory Enquiries for telephone numbers.)

England

The Environmental Stewardship scheme (ES) provides payment for managing and restoring farmland habitats including hedgerows. ES is administered by the Department of Environment, Food and Rural Affairs (DEFRA). Ring their helpline 08459 335577 for more information.

Your local authority may offer grants for hedge planting or management.

The Government's statutory nature conservation agency for England, Natural England, grant-aids projects where hedges are within sites of high conservation importance. Call the Headquarters on 0845 600 3078 for more information.

Wales

Tir Gofal offers voluntary 10-year agreements for managing and restoring hedgerows. Tir Gofal is administered by the Government's statutory nature conservation agency for Wales, The Countryside Council for Wales (CCW). Call CCW in Bangor on 01248 385500 for more information.

Scotland

The Scottish Government Rural Payments and Inspection Division (SGRPID) provides funding for hedgerow management through the new Rural Development Contracts. Phone SGRPID on 0131 556 8400.

Scottish Natural Heritage offers grants for general conservation projects.

Northern Ireland

The Countryside Management Scheme offers voluntary 10-year agreements for managing and restoring hedgerows. Grants are also available under the ESA Scheme. Both schemes are administered by the Department of Agriculture for Northern Ireland. Contact your local County Agricultural Development Officer.

Further references

Winspear R & Davies G (2005) A management guide

to birds of lowland grassland. RSPB, Sandy.
Barr C J, Gillespie M K & Howard D C (1994)
Hedgerow Survey 1993: Stock and change estimates
of hedgerow length in England and Wales, 1990-1993.
Institute of Terrestrial Ecology, Grange over Sands,
Cumbria.

Brooks A & Agate E (1998) *Hedging – A practical handbook*. BTCV.

Grey partridges



FWAG (1998) *The Good Hedge Guide*. Bayer plc, Bury St Edmunds.

The RSPB

UK Headquarters, The Lodge, Sandy, Bedfordshire SG19 2DL. Telephone 01767 693690

Northern Ireland Headquarters, Belvoir Park Forest, Belfast BT8 7QT. Telephone 028 9049 1547

Scotland Headquarters, 25 Ravelston Terrace, Edinburgh EH4 3TP. Telephone 0131 311 6500

Wales Headquarters, Sutherland House, Castlebridge, Cowbridge Road East, Cardiff CF11 9AB. Telephone 029 2035 3000

www.rspb.org.uk revised 2008

-----**J**----



The RSPB speaks out for birds and wildlife, tackling the problems that threaten our environment. Nature is amazing - help us keep it that way. We belong to BirdLife International, the global partnership of bird conservation organisations.

The Royal Society for the Protection of Birds (RSPB) is a registered charity: England and Wales no. 207076, Scotland no. SC037654

Illustrations by Hodgson, Langman & Powell wpo\np\5190



Farm hedges and their management

