Managing farmland habitats for invertebrates:

# Woodland

**Invertebrates are fascinating creatures that form the vast majority of animal life and they play an essential role in the health of our countryside. Invertebrates such as ladybirds and hoverflies are useful to farmers as they eat pests such as aphids. Without a variety of insects, many of our crops and native plants would not be pollinated – woodlands provide essential shelter for many of these pollinating species. Other wildlife such as birds and bats are dependent on a good supply of insects for food.**

There are lots of things that farmers can do to put the richness and colour back into the countryside. This leaflet contains suggestions and illustrations on how to do this and highlights some of the financial incentives on offer under current agri-environment schemes.

buglife
The Invertebrate Conservation Trust

Conserving the small things that run the world
www.buglife.org.uk


Illustration: The Art Agency/ Ian Jackson

# How to create features in woodland that will benefit invertebrates

**Woodlands are an extremely important component of the landscape, offering home to a wide range of British wildlife, including birds, bats and a large number of invertebrate species.**

## 1 Native tree species

Encourage native species such as oak, ash, elm and willow, which support the largest number of invertebrates.

## 2 Standing dead wood

Leave dead branches on trees except where there are public safety concerns, such as along the edges of paths, tracks and rides, and do not remove old tree trunks or stumps, as dead wood supports a very large number of rare invertebrates. Rot holes, hollows, sap runs, fungal fruiting bodies and all forms of decaying timber have invertebrates associated with them and should be retained.

## 3 Fallen dead wood

Leave fallen tree trunks or branches, especially large ones, where they are whenever possible, preferably on the edge of shade or in dappled sunlight. A different range of invertebrates from those in standing dead wood live in dead wood that is lying on the ground. A small amount of sun-baked dead wood will provide nesting sites for solitary wasps, many of which prey on aphids and caterpillars.

## 4 Varied structure

Maintain a varied age and height structure of trees to maximise the number of habitat niches for invertebrates within the woodland. Ensure that there is a supply of young trees to replace older ones as they die.

## 5 Climbers

Encourage climbing plants such as ivy and honeysuckle in order to provide food and shelter for a wide range of invertebrates. Ivy is particularly good for wildlife and mature ivy on a tree should never be cut at the base – trees are unlikely to be damaged by it.

## 6 Understorey shrubs

A diverse understorey of native species such as hazel and hawthorn will enhance the biodiversity of a site, especially at the edge of open space. Rotational coppicing will produce a range of conditions and benefits invertebrate species that require more open, sunny conditions.

## 7 Ground layer

Ground layer plants provide food, flowers and shelter for invertebrates such as ground beetles and spiders. If livestock are allowed to graze in woodland, this can damage the ground flora. Areas may need to be periodically fenced and allowed to recover.

## 8 Wet area

Avoid draining wetter areas such as springs or seepages (or even temporary pools and ruts in rides, if at all possible), as they support very specific and scarce invertebrate communities. If the woodland is well-used by people or livestock, these areas may need to be protected from damage.

## 9 Open rides and clearings

Maintain wide, open rides with sunny flowering margins to create sheltered areas where invertebrates such as bees, butterflies and hoverflies can feed on the nectar and pollen provided by flowering native plants such as angelica or hogweed. Keep the ends of the rides at the edge of the wood narrow or curved to avoid a wind-tunnel effect.

## Woodland edge

Encourage a gradual transition at woodland edges and ride margins, preferably with an edge structured to produce sun-traps or scallops: from tall trees through to scrubby species such as hawthorn and bramble, to tall grasses and flowering plants, then shorter grass. This provides a wide range of invertebrate habitats. A sudden transition from tall trees to short grass or arable will be less species-rich.

## Buffer zone

Create a buffer zone of at least 5 metres around woodland adjoining arable land or intensely managed grassland to protect it from spray drift or fertiliser inputs.

Black-headed cardinal beetle

Black-headed cardinal beetles (*Pyrochroa coccinea*) live under bark. The adults can often be seen feeding on flower heads at the woodland edge

Large striped plant-bug

The beautiful Large striped plant-bug (*Miris striatus*) feeds mainly on oak

# Funding and agri-environment schemes

There are a number of funding opportunities for farmers who want to create or manage woodland areas. Since 2005, the Forestry Commission has been operating the English Woodland Grant Scheme (EWGS), which has 6 types of grants for the creation or stewardship of woodlands. The Woodland Improvement Grant (WIG) is particularly targeted to delivering the UK Biodiversity Action Plan, the UK's commitment to protect biodiversity under the Rio Convention (1992). There are action plans to protect and enhance various types of woodland. These can be found at www.ukbap.org.uk/habitats.aspx

Farmers who manage their land to benefit wildlife can obtain funding via the Environmental Stewardship scheme. Entry Level Stewardship (ELS), Organic Entry Level Stewardship (OELS) and Higher Level Stewardship (HLS) all have woodland management options. A woodland parcel can receive support under Entry Level Stewardship (ELS) plus either Higher Level Stewardship (HLS) or the EWGS.

**Options that will benefit invertebrates in woodland and scrub:**

## ELS/OELS

- EC3/OC3: Maintain woodland fences
- EC4/OC4: Maintain woodland edges

## HLS

- HC7/8: Maintenance/restoration of woodland
- HC9: Creation of woodland in the LFA
- HC10: Creation of woodland outside the LFA
- HC11: Woodland livestock exclusion supplement
- HC15/16/17: Maintenance/restoration/ creation of successional areas and scrub

Snake fly (*Raphidia* sp.) These unusual-looking insects live in woodlands and eat other insects such as aphids

## Links

- For more detailed habitat management advice, Buglife has produced a series of guides and web pages on 32 BAP priority habitats. Further details can be found at **www.buglife.org.uk**
- Information on Environmental Stewardship is available from Rural Development Service (Natural England from October 2006) **www.defra.gov.uk/rds**
- English Woodland Grant Scheme (Forestry Commission) **www.forestry.gov.uk/forestry/infd-6dccen**
- The Farming and Wildlife Advisory Group (FWAG) website is at **www.fwag.org.uk**
- Habitat management advice for BAP priority butterflies and moths can be obtained from Butterfly Conservation at **www.butterfly-conservation.org**

Photo credits: Front cover: Keith Kirby, Claudia Watts. Page 3: Dragisa Savic, Roger Key. Back cover: Roger Key

Printed on 100% recycled stock

**Buglife-The Invertebrate Conservation Trust** is the only organisation in Europe devoted to the conservation of all invertebrates and is working tirelessly to save Britain's rarest bugs, bees, spiders, beetles and many other incredible creatures.

170A Park Road, Peterborough, Cambridgeshire, PE1 2UF
**Telephone:** 01733 201 210
**E-mail:** info@buglife.org.uk

Buglife-The Invertebrate Conservation Trust is a company limited by guarantee
Company No: 4132695 Registered Charity No: 1092293
Registered in England at 170A Park Road, Peterborough, Cambridgeshire, PE1 2UF

Conserving the small things that run the world
**www.buglife.org.uk**