

NATIVE WOODLAND



Photo: Helen Caldwell

GRASSLANDS



Photo: Ian Knox

WETLANDS



Photo: Calvin Harlow

PEATLANDS



Photo: Ronnie Irvine

URBAN



Photo: Laurence Gibson

INVASIVE SPECIES



Photo: Ronnie Irvine

Native woodland is perhaps the habitat with the greatest diversity of native species. Most areas throughout Northern Ireland, if left totally unmanaged, will scrub over and eventually develop into woodland. In the past, most of our natural vegetation was woodland, with many of our native species adapted to live in this habitat. Today however, Northern Ireland is one of the least wooded countries in Europe with only around 2.0% of land under native tree cover. Hedges are defined as any linear boundary comprised of planted shrubs. They are used by a large number of animals and plants and act as wildlife corridors allowing dispersal and movement around the countryside.

Grasslands make up the majority of enclosed agricultural landscape of Northern Ireland, forming the familiar pattern of field and hedge. Most of this is intensively managed for agricultural production and the biodiversity of these areas is generally poor. It is estimated that traditional species-rich hay meadows may have declined in Northern Ireland by as much as 97% over the last 70 years. In areas where farming practices are less intense, grasslands can be a rich and diverse habitat supporting a wide range of species. In addition, appropriate levels of grazing is perhaps one of the best conservation 'tools' for maintaining a variety of grassland habitats.

Northern Ireland is particularly rich in wetland habitats. Open water habitats range in size from a 'pond' to Lough Neagh, the largest freshwater lake in the British Isles. Rivers and streams form linear corridors across the landscape. As well as being an important habitat in their own right, they act as highways allowing movement across the landscape for a range of species. Most wetland habitats have other wetland habitats i.e. fen, marsh or swamp associated with them. It is this mosaic of habitats which supports a significant proportion of Northern Ireland's biodiversity.

Peatlands are peat forming habitats which include bogs and heaths. They form one of the most characteristic features of Ireland. The climate here is particularly well suited to peat formation, with high rainfall, cool summers and high atmospheric humidity. Lowland raised bogs develop primarily in lowland areas, most notably in river valleys, lake basins and between drumlins, while blanket bogs tend to occur at altitudes in excess of 200m. Heathland vegetation occurs widely on mineral soils and thin peats. Peatlands support a number of specialist species that can not be found in any other habitat.

The wide range of habitats found in our urban green spaces makes them extremely rich in terms of the variety of wildlife to be found there. Walls, hedges, trees, lawns, flower beds and vegetable plots all provide food and homes for plants and animals. Wildlife can also flourish in industrial or built-up areas including business sites, retail parks and derelict building sites. With many of our native habitats increasingly under threat, gardens, parks and other urban green areas have become ever more important for the survival of some of our well known species.

Non-native invasive species are the second biggest threat to biodiversity after habitat loss. A number of non-native species have been introduced to Northern Ireland, and while the vast majority of these do not cause problems for our native species, a few do. Invasive species are highly adaptable and strong competitors resulting in a negative impact on our local flora and fauna. In addition some species can have serious economic and health and safety implications. Three common species found within Mid Ulster include giant hogweed, Himalayan balsam, and Japanese knotweed.

HOUSE SPARROW



Photo: Mark Edgar

The house sparrow is closely associated with human habitation. They are opportunist and will live wherever there are suitable nesting and roosting sites and enough food. The Northern Ireland population is estimated at around 180,000 pairs. Survey results have consistently shown declines in Northern Ireland with a decrease of 34% since 1994, and is now even absent from parts of the west of Northern Ireland.

TREE SPARROW



Photo: Aonibhikuma

Being shyer than house sparrows, tree sparrows are not common in urban areas and are more likely to be found on farmland. During winter, they form mixed flocks with house sparrows and other seed-eating finches. The tree sparrow has undergone a population crash in the UK, declining by 93% between 1970 and 2008. Trends are unknown in Northern Ireland and it is thought there are only several thousand breeding pairs.

SWIFT



Photo: David Moreton

Swifts are those dark coloured streamlined birds which speed and scream over our towns and cities in the summer. A swift spends almost all of its life on the wing and it is estimated that a swift will fly, on average, 500 miles each day. Although still widespread throughout Great Britain and Ireland, numbers have been and continue to decline. It is estimated that swift numbers have plummeted by 47% in the UK in the last 10 years.

BATS



Photo: Rauno Kalda

Bats are the only true flying mammal in the world. All eight species to be found in Northern Ireland are nocturnal feeders, preying exclusively on insects. Each bat can eat up to 3,000 insects in one night. They particularly favour woodlands, hedges, parkland, unimproved pasture, sheltered gardens and areas where there is standing or flowing water. Bats hibernate during the winter in cool, humid places with stable conditions.

BUMBLEBEES



Photo: Ronnie Irvine

There are 13 species of bumblebee in Northern Ireland. They are generally associated with herb-rich, unimproved grasslands, and their decline is mainly due to the loss of this foraging habitat. Bumblebees are social insects, forming annual colonies founded in spring by a single queen. Over the summer this colony builds up in numbers before most of the bees die off at the end of the season with only the new queens hibernating to start the cycle again the following spring.

IRISH WHITEBEAM



Photo: Neville McKel

The Irish whitebeam is one of the relatively few plants endemic to Ireland. It grows in a range of habitats occurring in open and semi-open conditions. It is scarce in Northern Ireland, scattered in distribution, and difficult to find. It has been reported from about eight or nine sites, but the precise number is unknown because of confusion with common whitebeam. The number of trees at any one site is very small so the total population within Northern Ireland is tiny and vulnerable.

Image: www.shutterstock.com

GARDENING FOR WILDLIFE

With many of our native habitats increasingly under threat, gardens have become ever more important for the survival of some of our well known species. The wide range of habitats found in gardens make them extremely rich in terms of the variety of wildlife found there. Every garden, however big or small, is a potential nature reserve.

Each garden may not seem significant on its own, but collectively, they can have a major influence on the diversity of wildlife to be found in any given area. Manicured gardens will generally be less species rich than those that are perhaps slightly less looked after or into which wildlife has been encouraged. However, this does not mean your garden has to be overgrown with 'long grass and nettles' to provide local wildlife with food and shelter. Even those gardens that do not initially appear to be wildlife friendly, on closer inspection, will harbour an array of species hidden away in walls, fences, hedges, flowerbeds and the lawn.

In the typical suburban garden there can be as many as 250 species of plant. This figure is higher than could be recorded in many native habitats, and although more than half of these are probably non-native species, this value as a food source is unrivalled. At the height of the summer, the blazing beds and borders of a garden produce a huge array of scents and nectar, a real haven for a multitude of insects which in turn attract birds, bats and hedgehogs.

By making simple changes in you garden, you can make a huge difference to the wildlife in your local area. Try putting up nest boxes, create a log or stone pile, grow native species plants, or simply let a bit of the garden go 'wild'. If you have space for bigger projects, consider creating a wildlife pond, or planting a native hedgerow or mini-woodland.

By maximising the biodiversity in your garden, you are making a real contribution to ensuring the survival of both plant and animal species in your local area.

Plants to attract bumblebees to your garden:

- Bluebell
- Borage
- Bugle
- Comfrey
- Foxglove
- Greater knapweed
- Honeysuckle
- Kidney vetch
- Red clover
- Sedum
- Thyme
- Viper's bugloss.



Photo: Plunkett Scullion



Photo: Plunkett Scullion



Photo: Mark Edgar



Photo: Mark Edgar

Mid Ulster Biodiversity Project



GET INVOLVED

For the Mid Ulster Biodiversity Project to be successful, it is vital to have the support and involvement of local people and organisations. There are many ways you can play a valuable part and take action for biodiversity. Below are just some examples of how you can become involved.

Recording local species

The Mid Ulster Biodiversity Audit has identified what habitats and species have been recorded in the area. This is updated as and when new records become available. We are grateful for all records, no matter how common you feel the species may be, but we are particularly keen to get records of species you think are rare or unusual. Contact Mark directly or text the species location and date to the Wildlife Text Number: 075 1737 2617.

Identifying and developing projects

Local people are ideally situated to identify local sites that could be enhanced for the benefit of wildlife. Enthusiastic individuals and community groups could take the lead in developing a site for biodiversity. We will be able to assist the project through the Action Plan process.

Practical work

There are a number of projects throughout the area where local people can get 'stuck in' to help wildlife. These projects include tree planting, hedge laying, planting wildflowers, digging ponds, building and putting up nest boxes, or even building seats for people to relax and enjoy the local wildlife.

Walks and talks

A number of walks and talks focusing on various aspects of biodiversity are held throughout the area. Examples include: woodland walks, swift evenings, bat nights, moth nights, butterfly walks, wildlife gardening, etc. Through these events people will be encouraged to learn about, care for, and enjoy their local biodiversity.

Do something in your garden

Everyone can do something to improve their gardens for wildlife. Planting nectar producing flowers, putting up bird boxes, bug boxes, habitat piles, and even having your own compost heap can all help a variety of species. No project is too small, and if everybody did something, it would make a vast difference.

If you would like to get involved in the Mid Ulster Biodiversity Project, Mark Edgar, Biodiversity Officer, would be delighted to hear from you. Please contact Cookstown, Dungannon or Magherafelt council or e-mail: mark.edgar@dungannon.gov.uk



Photo: Sperrins Gateway LP



Photo: Vivienne Beck



HELP THE SPARROW

House sparrows and tree sparrows are fairly similar in appearance and have broadly similar requirements. The house sparrow is closely associated with human habitation and will live wherever there is somewhere suitable to feed, roost and nest. Being shy, tree sparrows are not common in urban areas and are more likely to be found on farmland.

In Northern Ireland both the house sparrow and tree sparrow have undergone serious declines in numbers and distribution. It is thought that this decline is due to a reduction in available invertebrates to feed their young, a reduction in grains and seeds to sustain them through the winter, and the loss of next sites.

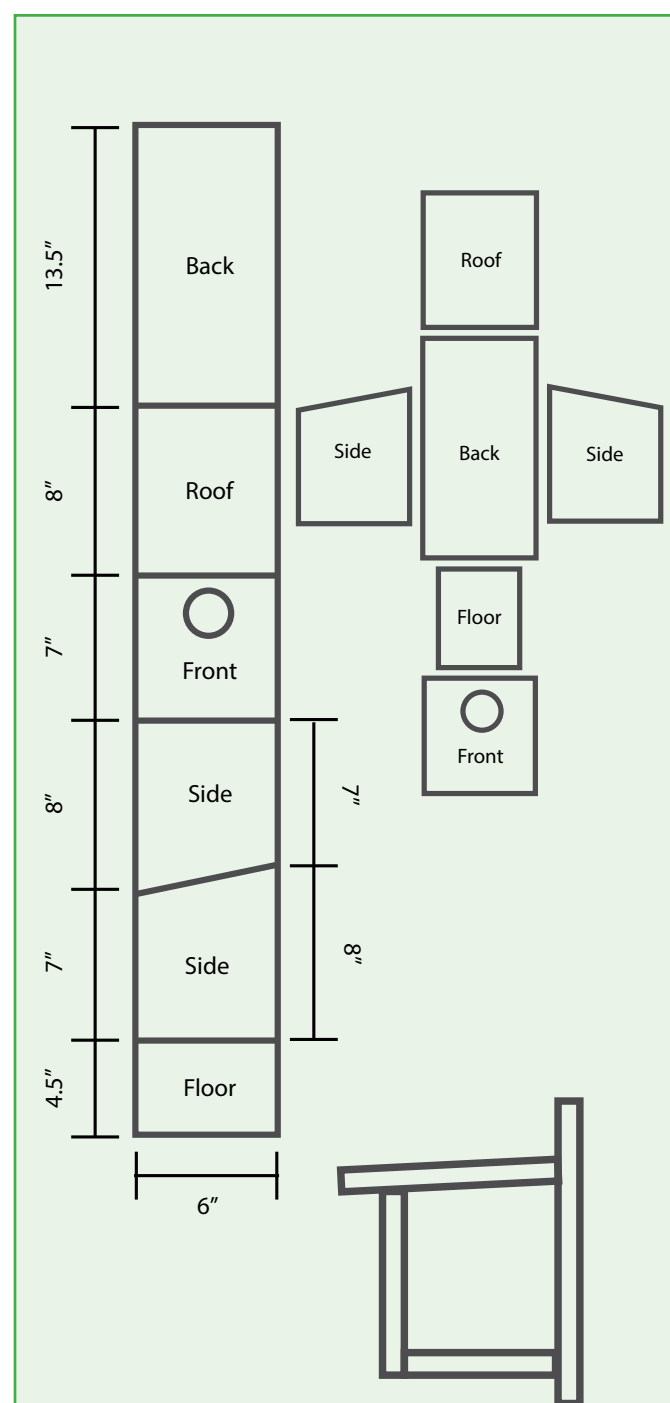
Sparrows will readily take to artificial nest boxes in areas where natural nesting opportunities are limited. Boxes specifically designed for sparrows can be purchased, but can also be made relatively cheaply and easily by even the least skilled handyman!

The dimensions shown in the diagram are only a guide and are by no means critical, but if followed, this box can be made from one 48 x 6 inch plank of timber, 0.75 inches thick. The diameter of the hole must be least 30mm and ideally 32mm. The roof should be hinged or screwed to allow the box to be cleaned out at the end of the year. The outside of the box can be treated with a wood preservative, but do not treat the inside. Roofing felt can be fixed to the roof for added protection.

Site the box in a sheltered position, on a tree or wall at about head height (or a bit higher if possible), preferably facing north-east to south-east. South facing boxes become too hot on a warm sunny day, while west facing boxes are open to prevailing wind and rain.

As sparrows are colonial breeders, several nest boxes can be put up in the same area, but do not put them right beside each other unless the entrance holes are facing different directions.

Never disturb the birds during the breeding season, but remember to clean out the nest box each Autumn!



BUILD A SPARROW BOX

BUILD A BAT BOX

All 8 species of bat found in Northern Ireland are nocturnal, preying exclusively on insects. They exploit a range of habitats and particularly favour woodlands, hedges, parkland, unimproved pasture, wetland areas and sheltered gardens.

If you want to put up a bat box to encourage bats into your garden, there are a variety to choose from and various designs to make your own.

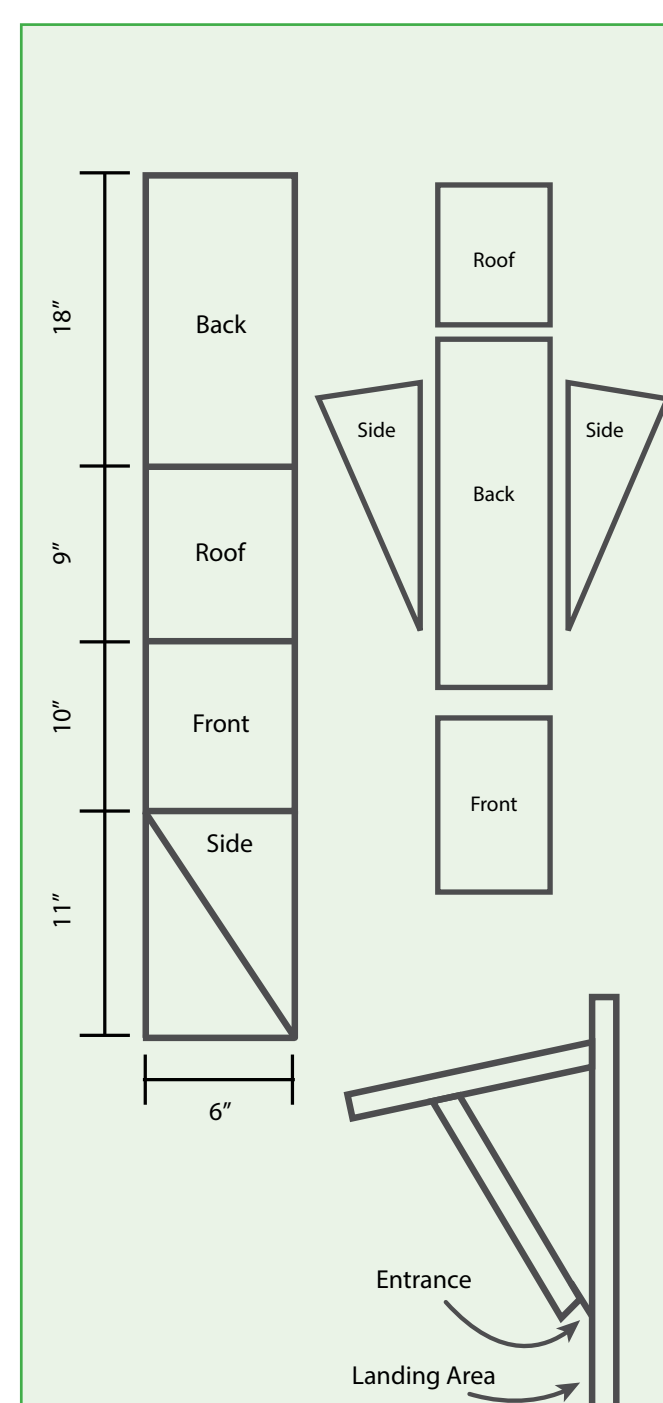
All timber used in bat boxes should be rough-sawn to give bats something to cling to, and must also be untreated, since bats are very sensitive to chemicals used for timber treatment. A landing area is essential, and the entry slit is best if 15 – 20 mm. Once up, a bat box cannot be opened legally without a license.

A basic wooden bat box can be constructed to the same design and dimensions as the sparrow box shown, but instead of a hole on the front it has the entrance slit along the back underside of the box.

The wedge-shaped design shown has been known to work well. The size of the box can be adjusted to suit, but these dimensions will enable the box to be made from one length of timber 48 x 6 inches. The main variable will be the length of the front panel which will determine the size of the entrance slit – [cut shorter for a wider opening]. The outside can be painted with a water-based non-toxic paint, but do not paint the inside or landing area.

Boxes are more likely to be used if they are located where bats are known to feed or along a tree line or hedgerow which they use for navigation. Ideally, several boxes should be put up facing in different directions to provide a range of conditions. Boxes should be put as high as possible in sheltered sunny places. On buildings, boxes should be placed as close to the eaves as possible and not too exposed to avoid extremes of heat and cold.

Bats need time to find and explore new homes, and although they may start using boxes as overnight roosts within a week or two, it may be several years before boxes have residents – be patient!



BUILD A BAT BOX

SAVE THE SWIFT

The swift is a familiar sight and sound of summer as they fly low 'screaming' over the rooftops in our towns and villages. Although still fairly widespread across Northern Ireland, the swift population has plummeted in recent years with whole colonies being lost.

Swifts nest in the eaves and cavities of buildings, in holes around pipe-work, behind worn masonry, and missing bricks and tiles. These sites are generally associated with older buildings, which when refurbished/renovated result in the site being lost.

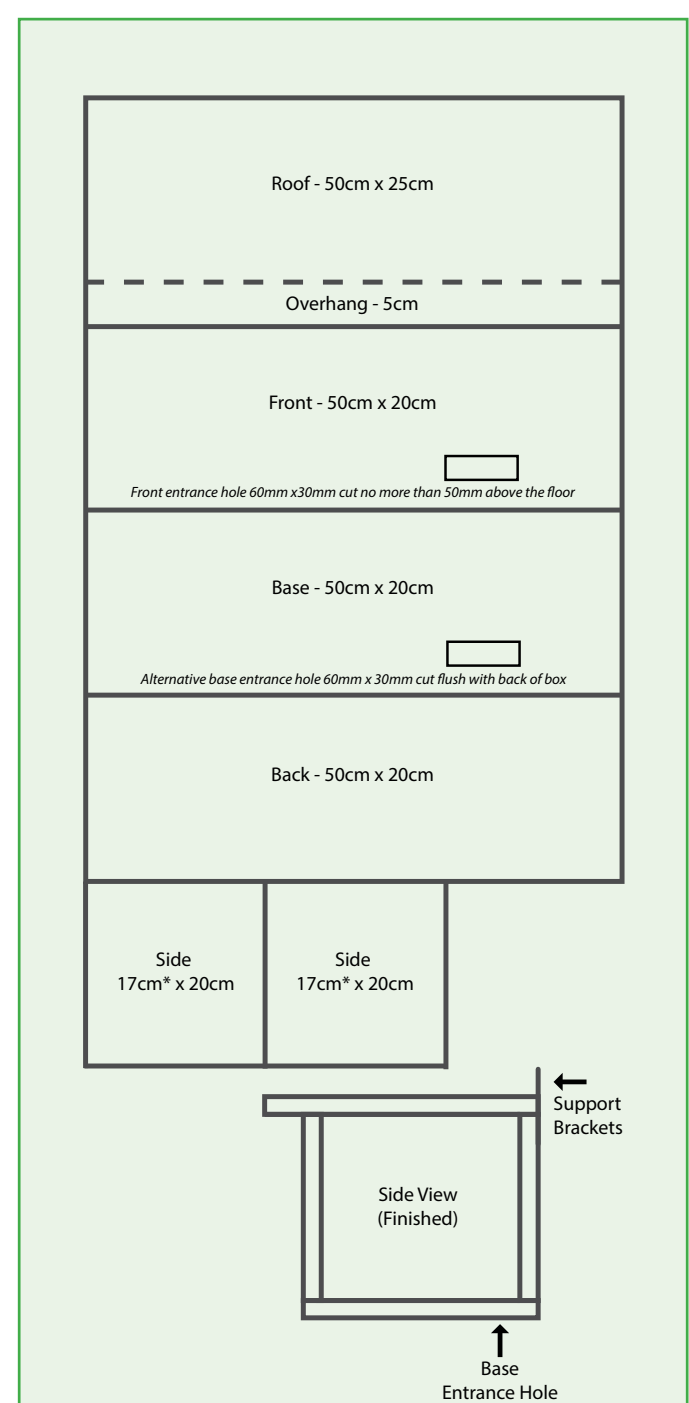
If you have an appropriate location, it is well worth putting up swift nest boxes. A range of specifically designed boxes for swifts can be purchased, but they can also be made relatively cheaply.

The nest box should be made from 12mm-15mm thick weatherproof exterior or marine ply. Cut the roof, front, back and base, and check the dimensions for the side panels which fit inside the other panels and will depend on the thickness of the wood. Swifts like a snug entrance hole of 55-65mm long x 30-35mm high in either the front or the base. Base entry may deter other bird species. Internal batons can be used for reinforcement at each end. Do not treat the interior of the box, but the outside can be stained or painted. Roofing felt can be fixed to the roof for added protection.

Site the box under the eaves, or in the apex of a gable, in the shade, well away from the sun. It should be at least 5 metres above ground, with clear adjacent airspace and no obstructions, to enable the swifts to 'drop' out of the nest.

Never disturb the birds during the breeding season. The nest can be cleaned out each winter, but this is not essential.

As swifts breed in colonies, the best chances of success are close to where swifts are already breeding. The use of a 'swift call' CD has proven to increase the uptake of new nest sites. If possible, try putting up a number of boxes. Not only will this give the birds more choice, but may be the foundation of a new colony.



BUILD A SWIFT BOX