

## Nature Friendly Allotments

Allotments are great for growing everything from flowering plants to edible vegetables. Growing your own food helps reduce your contribution to climate change whilst supporting local access to affordable and healthy food. In addition, allotments are often green corridors and habitats for wildlife, supporting our urban biodiversity. Allotments can also act as nature-based solutions to mitigate and adapt to climate change, helping with both carbon sequestration and flood risk reduction.

It is beneficial to both growers and the local wildlife to consider biodiversity when establishing and maintaining allotment sites. There are many ways you can consider making allotments nature friendly. This could involve including:

- Homes for wildlife through bat and bird boxes, bug hotels, etc.
- An overgrown corner of brambles/thorn species offering nest sites for birds
- A wood pile to give a home to a wide variety of insects and birds searching for food.
- A small pond to support amphibious animals, which are very useful to gardeners as many forage on slugs and snails
- A saucer of water to provide water for hedgehogs and birds
- A hole at the base of a boundary fence to create a valuable, connected network of greenspace hedgehogs can roam through
- Setting aside a plot or half-size plot as the site's communal biodiversity corner
- Boundary trees and/or native hedges
- Linear or boundary orchards or a community orchard corner
- In Spring/Summer cater for pollinators and birds through companion planting and fruit trees
- In Autumn provide food and shelter for wildlife through wild corners, hibernacula for hedgehogs and amphibians, fruit trees.



Image 1 - Croftburn Allotments Pond supported by Froglife. Sourced from [APSE](#).

## Top tips for Allotments

**Add compost:** In spring earthworm activity is increased when organic matter such as composted vegetation or farmyard manure is worked into the soil. This keeps it open and aerated and retains moisture near to the roots of summer crops.

**Rotate vegetable crops:** This helps to prevent the build-up of crop specific, soil-based problems, but also helps maintain the nutrient balance across the whole cultivated area.

**Grow a range of fruit, vegetables and herbs:** The early flowers of gooseberries and currants offer nectar to emerging bees and other insects. Later in the season the flowers of vegetables and herbs provide nectar. Different flowers attract different insects and pollination depends on their visits.

**Companion planting:** Certain plants grown together help reduce attack by pests and disease. For example, onions or leeks grown with carrots help deter the carrot fly. French marigolds grown with tomatoes make whitefly infestation less likely. Pollination can also be improved by planting flowering herbs among the vegetables: sage with carrots or brassicas, borage with tomatoes (or amongst fruit trees). The benefit to us is that it looks attractive too.

**Grow some native flowers and berried bushes:** Plants native to Scotland tend to cope well in our climate and soil conditions, producing flowers, berries and seeds. Many 'exotic' plants are, however, just as good for wildlife so they do not need to be dismissed. The simpler the flower, the easier it is for bees and hoverflies to access them: bear this in mind if choosing many double-flowered 'exotics'. More than 70% of our birds depend on insects which in turn, depend on plants, so our choices are important.

**Provide water:** A regular supply of water can be provided in a shallow dish, but make sure flat stones are added to help birds perch near the water. If appropriate, include a water dish on the ground for hedgehogs, but keep this hidden from pets. Ponds or water features such as a water sink or barrel, flowforms or bog gardens can be a welcome feature in many community gardens and allotments.

**In the autumn provide food and shelter for wildlife:** Leave seed heads and foliage on herbaceous perennial plants, tidying them away only in the spring - many beneficial insects hibernate in plant stems. A pile of fallen leaves, twigs and other vegetation in a corner of the garden will help give shelter to frogs, toads, hedgehogs and field-mice.

**Garden or allotment buildings:** if suitable, enhance with bird feeders, bird or bat boxes, or consider a "green roof" of sedum, mosses or wildflowers.



Image 2 - Green Roof Merrylee Allotments. Sourced from [APSE](#)

# Sustainable Gardening

## Soil

The key to successful gardening is healthy soil. Sustaining the goodness in the soil is vitally important for healthy plants, vegetables and fruit. This can either be done using artificial fertilizers and finite natural resources such as peat or by using products and processes which are natural. If we garden in harmony with the natural processes already happening on our plot, biodiversity will benefit as well as protecting our health and the health of our environment.



## Compost

Composting is part of the natural cycle of growth and decay. Numerous microscopic organisms of both vegetable and animal origin break down the vegetable matter and release nutrients into the soil in a form which plants can use. In turn, the plants provide food for the insects which then become food for the birds. We disturb this cycle by removing part of the natural ecosystem. If we continue to remove and not replace plant material, the soil becomes unproductive because it is deficient in essential nutrients. Artificial fertilizers do not support the growth and the activity of the beneficial micro-life in the soil, nor do they improve the soil structure. They do, however, deplete the world's fossil resources.

Information on how to make your own garden compost can be found here: try [www.homecomposting.org.uk](http://www.homecomposting.org.uk) or [www.rhs.org.uk](http://www.rhs.org.uk) or just search for 'compost'.

## Organic fertilizers

Natural fertilizers such as bone meal, blood and fish meal can be used to improve the nutrients in the soil. So can home-made liquid comfrey, seaweed 'tea' and other green fertilizers. Further information can be downloaded via [www.no-dig-vegetablegarden.com](http://www.no-dig-vegetablegarden.com).

## Farmyard manure

Farmyard manure is a good source of nitrogen, but garden compost, because of its more varied micro-organisms produces a much wider variety of nutrients.

## Green manure

Green manures are ideal whenever a patch of land is going to be free of crops for six weeks or more, and they are particularly useful to vegetable gardeners and allotment holders. Although many green manures can be sown all year round, they are ideal when sown in the autumn to over-winter, when vegetable plots are generally empty. For more information visit [www.bbc.co.uk/gardening](http://www.bbc.co.uk/gardening) and [www.rhs.org.uk](http://www.rhs.org.uk).

## Rock dust

Pioneered by the SEER Centre Trust near Pitlochry, rock dust contains a very wide range of slow release minerals and trace elements. Organically approved, the dust increases microbial activity, reduces odour and improves fertility in compost - [www.seercentre.org.uk](http://www.seercentre.org.uk).

## Peat

Using peat-free alternative products such as coir will help protect Scotland's fast disappearing peat bogs which have taken thousands of years to create. Peat bogs are home to many special animals and plants, and so peat compost should not be used. Download the 'Garden Without Peat' leaflet from SNH's Garden for Life series [www.keepsotlandbeautiful.org/media/845511/peat.pdf](http://www.keepsotlandbeautiful.org/media/845511/peat.pdf)

## Mulching

Adding a protective layer of compost, bark chips or coir helps retain moisture in the soil and suppresses weed growth down. As the mulch rots down it also helps to add nutrients to the soil.



## Boundary Biodiversity

Some of the richest wildlife areas can be found around boundaries. A few simple actions can increase biodiversity, improve security and enhance the view at the same time.

**Hedges** - A thick hedge around the garden, orchard or allotment is invaluable as it can deter unwelcome intruders, lessen traffic noise and provide food for insects, birds, mammals - and us. It is an effective windbreak, a shelter belt and a superb wildlife habitat. A hedge can also act as a green corridor which allows wildlife to move from place to place in relative safety.

A good native hedge should be planted in a staggered double row 30cm wide with 25cm between plants. Hawthorn attracts over 200 species of insect which in turn are important food sources for birds, bats and mammals. A mix of hawthorn and blackthorn as the main hedging plants is ideal and they can be interspersed with other species such as holly, hazel and dog-rose to give a variety of flowers, nuts and berries throughout the seasons. This will provide a variety of attractive, nectar producing flowers in the spring, nest sites during the summer and essential winter food.

A new hedge should be pruned hard in its first two years so that there is thick growth at the base. It takes about four years for a hedge to mature, after which a trim every other year will ensure a selection of flowers and berries. Faster growing plants such as dog roses and brambles (where appropriate), can be used to fill gaps. Small trees: crab apple, rowan, bird cherry or hazel, increase the diversity of the plant species and provide additional food for the wildlife. Standard trees can provide song posts for some of the more territorial birds.

If a particularly strong barrier is required, the hedge can be laid - cutting the branches almost through and interweaving them. Planting thornier species can also help make an impenetrable hedge.

Alternatively, attractive “soft hedges” can be grown which are wildlife-orientated: lavender, pyracanthus, box, or rosemary. These often look best as low hedges grown to delineate certain areas of the allotment or garden.



Image 3 - SACRO plot Tollcross Park Allotments with foraging hedgerow at rear. Sourced from [APSE](#)

**Fences, pergolas, summer houses, gateways and arches** - even sheds can be used as frames for attractive climbing plants such as clematis, roses, honeysuckle and ivy - all good for wildlife. As a year-round wildlife plant, ivy cannot be bettered as it provides winter berries for birds, very early nectar for bumblebees, nesting for sparrows and hibernation areas for bats. Existing features can be enhanced to look good and assist wildlife. Vegetables such as runner beans or French beans can be grown on pergolas and arches, and hanging baskets can be filled with Tom Thumb tomatoes, chillies, herbs and nasturtiums.

**Stone or brick walls** can host a wide variety of lichens and mosses, and provide a home to mason bees. Where appropriate, small plants can be allowed to gain a foothold to add visual attractiveness and give another dimension to the garden wildlife. Un-mortared stone walls can provide insect food for wrens, robins and other birds as well as important hibernation places for lizards and toads.

**An undisturbed log** pile against the boundary gives a home to toads, spiders, millipedes, centipedes and ground beetles and will often be used by birds such as wrens, searching for food.

**Wild areas** - in many allotment and garden areas there are small pieces of ground - under trees, compost heap corners, wet or stony patches - that can be left alone as they provide excellent refuges for amphibians, reptiles, bumblebees and butterflies. Alternatively, a planted wildflower strip, either in a communal area, or along one side of an allotment can add bright summer colour and attract pollinators such as bees and butterflies. This can be replicated in a community garden or orchard too. Don't forget to provide a quiet corner for hedgehogs: keep a space under the shed, install a hedgehog hibernation box where it won't be disturbed, or pile autumn leaves up in a corner

Information sourced from [Making Way for Nature Booklet](#)

## Suitable trees, shrubs, and plants for encouraging biodiversity

Allotment vegetables, fruit trees and companion plants are beneficial for wildlife. Native species with single flowers attract bees and butterflies. It is important to grow a range of different flowers as bee species vary in the length of their tongues and how far into the flower they can delve in order to obtain the nectar.

Many of the plants grown on an allotment will provide flowers right through the butterfly and bumblebee season. Spring flowers are vital for insects coming out of hibernation and Autumn flowers help them build up their reserves for winter. The butterfly experts warn that insecticides and pesticides kill butterflies and many pollinating insects as well as ladybirds, ground beetles and spiders. Allowing one or two onions and brassica to flower and using clover as a green manure will increase the flowers available. Some stalks should be left on plants in the Autumn so ladybird larvae and other insects can hibernate in them.

Information sourced from [Scotland's allotment site design guide](#).

plant species	flowers and fruit	benefits
<b>herbs and companion plants</b>		
Chives Thyme Sweet rocket Brassica	Spring	Butterflies / bees
Apple Gooseberry Black currant Lambs ears Poached egg plant Sweet Cicely		Bees
Nettles Sorrel Burdock		Caterpillars
Feverfew Valerian	Early summer	Butterflies / bees
Poached egg plant Sage		Bees
Lavender Runner bean Marjoram Pot marigold	Summer and autumn	Butterflies / bees

plant species	flowers and fruit	benefits
<b>herbs and companion plants (continued)</b>		
Bergamot Betony Borage Raspberry	Summer and autumn	Bees
Evening primrose		Moths
Nasturtium		Butterflies, caterpillars
Mint / catmint Hyssop Clover Onion	Late autumn	Butterflies / bees
Cardoon Lemon balm Phacelia Rosemary Chicory Sunflower		Bees

<b>hedging plants</b>		
Blackthorn	flowers Mar-April sloe fruit in autumn	thorny, insects, jam-making
Worcesterberry	flowers in March fruit July-Aug	very thorny, insects, jam-making
Holly	flowers April-May berries in autumn	prickly, good cover for birds
Hawthorn	flowers May-June haws in autumn	birds and insects, especially wasps
Guelder rose	flowers June-July berries in autumn	insects and birds
Firethorn	flowers early summer, berries in autumn	nectar for insects and berries for birds
Honeysuckle	flowers June-Sept berries in autumn	birds, moths, bees
Bramble	flowers July-Sept	very thorny, insects, pies and jam-making
Buddleia	flowers summer to autumn	butterflies