Benson Nature Group
Caring for Benson's green spaces

Managing your garden for wildlife

With the intensification of farming and the consequent reduction in biodiversity our gardens are increasingly important havens for wildlife. This BNG leaflet offers some advice on things we can all do to make space for nature. There are numerous sources of further information online. This leaflet provides a simple, locally relevant introduction.

Benefits

Apart from the enjoyment of observing the wildlife you encourage, there are other practical benefits such as natural pest control. Frogs, slow-worms and hedgehogs love to feast on slugs. Ladybirds, lacewings and hover-fly larvae will strip lettuces and roses of aphids. Even hanging a peanut feeder above a rose patch will encourage visiting blue tits to notice aphids on roses to feed their young in the spring. Encouraging bees and butterflies will help the pollination of fruit trees and vegetables, while increasing the chances of survival of the insects themselves.

Maintenance

Resist the urge to tidy up too much, especially in the autumn. Deferring pruning perennials or uprooting annuals until early spring will provide food and shelter for a host of animals, birds and insects over the winter. Leave healthy herbaceous and hollow-stemmed plants unpruned until early spring as they provide homes for overwintering insects as does long grass.

Species such as teasel (Dipsacus Fullonum), wild goldenrod (Solidago Virgaurea), groundsel (Senecio Vulgaris) and many herbs provide seed for birds and small mammals. Ivy (which does not strangle trees as is often thought) also provides excellent nesting and roosting habitat as well as being an important food and pollen source for wildlife, particularly as it provides late season nectar for insects when other sources have diminished. Leave longer grasses, thistles and knapweeds in wilder parts of the garden; these are food plants for many pollinators. Make an insect or bug hotel and put it up in a sheltered position. Overwintering ladybirds and lacewings will find this useful. In late winter, clean out bird boxes so they are ready for new nests in spring.

If your garden is managed by professional gardeners, keep an eye on them and don't assume they are knowledgeable about the needs of wildlife in your garden.

Compost/Dead Wood

Great Spotted Woodpeckers will feed on invertebrates found in rotting branches. Leave some dead wood on trees provided there are no health and safety concerns.

If you can, create a compost heap in your garden. Your own compost heap is a free, organic alternative to chemical fertilisers, and a warm, active compost heap provides homes for wildlife, particularly for cold-blooded slow-worms.

A pile of logs in a shady corner, or standing dead wood, will feed beetle larvae and shelter many other animals including frogs, toads and slow-worms. The rare stage beetle, still found in South Oxfordshire, needs dead wood to breed in.

Make a bug hotel such as this one in Hurst Water Meadow for bugs to overwinter and get a head start the following year. Children love to be involved in such activities.

Lighting

Badly positioned lighting can have negative impacts on moths, bats, birds and other wildlife. Minimise the impact of lighting by choosing low intensity lighting, ensuring you have some dark areas in your garden and turn it off when it is not needed.

Pesticides

Avoid/minimise using chemicals (eg ant powder, slug pellets, weed killers, insecticides etc) as these will harm nature's own pest controllers such as birds and hedgehogs, as well as butterflies, ladybirds, bees and other pollinators. Use biological controls eg nematodes, as the first line of control.

General

You can also help the environment by using peat-free compost and non-plastic single-use pots.

Lawn Mini-Meadow

A lawn mini-meadow is a small wildflower area in your garden/lawn, that can be created by sowing seeds or planting plug plants. No compost, manure or fertiliser should have been added to the soil as wildflowers prefer soil with low nutrients. It is also important you can access the mini-meadow area to mow it later in the year and remove the mown cuttings.

A mini meadow alongside a lawn

The stages are:

1. Start by preparing the area. Remove grass, weeds and top layer of soil. Rake lightly. Over 50% of the area and ideally 75-90% should be bare ground as wildflower seed needs to touch earth to germinate.
2. Mix together one part wildflower seed to four parts grass seed with a small amount of sand to help you see where you are sowing. Do not take seeds from the wild but use specially grown seeds.
3. Sprinkle your seed mix in spring or autumn. Some seeds need to freeze during the winter to be able to germinate and should ideally be sown in September/October. 5 grams of seeds will cover 1 square metre of soil. Poppies, cornflower, corncockle and corn marigold are annual cornfield flowers and will not appear after the first year without turning the soil over again. Cornfield flowers require different management from meadow wildflowers but can be used to provide a colourful beginning in the first year as it is unlikely that meadow wildflower seed will have grown enough to flower in this time. Meadow wildflowers should flower from the second year onwards after any annuals have disappeared.
4. Walk over the soil to tread the seeds in and water lightly
5. Arrange branches over your seeds to keep animals out
6. Cut in late summer to 5 – 10cm each year after flowering. Put the cut grass into rows which are turned each day for around a week. This allows any seeds trapped in pods to fall onto the ground. Afterwards, remove and compost the cut vegetation. Leaving the cut material on the grassland will add nutrients to the soil, encouraging grasses at the expense of the wildflowers.

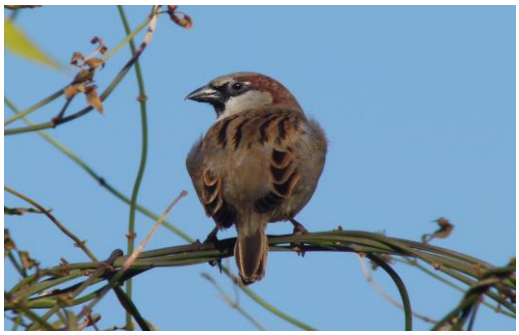
Alternatively plug plants can be planted in May/June directly into a section of your lawn. Keep well watered for the first six weeks and cut as stated in point 6 above.

Birds

More than 60 species of birds have been recorded in gardens around Benson. Encouraging birds will not only add an attractive feature to your garden, but will also benefit birds whose numbers are declining, especially on farmland.

Garden Features for birds

- Mature trees act as singing posts and provide nest sites
- Ponds attract insects for food and provide drinking and bathing if designed properly
- Composting attracts worms and insects for food
- If you have space for a heap of wood and old branches, this will encourage insects, beetles and spiders, all of which provide food for the birds (and hedgehogs).



Bushes provide birds with cover or a vantage point from which to claim their territory

Feeding

- Favourite "artificial" foods are unsalted peanuts, fatballs, sunflower and mixed seed
- A bird table or hanging feeders should be provided as well as food on the ground
- Windfall and rotting apples, pears etc. will be eaten by a variety of birds.
- If you do not have room for a pond, always provide water for both drinking and bathing. Flowerpot "saucers" are ideal.
- A patch of fallen leaves left on the earth will keep the soil moist, encouraging worms near to the surface and providing a source of food for blackbirds and thrushes.

Blue tits will readily take peanuts and fatballs from feeders

Nesting

- Open fronted boxes and tit boxes with a small circular hole are most likely to be used in gardens.
- Natural sites should also be developed such as ivy clad walls and, wherever possible, hedges instead of walls or fences. In larger gardens, leave the old rotten tree and branches, providing safety is not compromised, as hollow wood is used by a wide variety of species for nesting and feeding. Dead wood is also vital for certain specialist species of beetle.
- Avoid trimming hedges during the nesting season (March – August).

Plants

Plants that produce seeds, fruit or attract insects will all attract birds to your garden. Here is a very brief list of the possibilities.

- *Seed plants include poppy, thistle, teasel, and lavender. It is obviously important to leave these and other plants to set seed.*
- *Fruit plants include blackberry, honeysuckle, ivy, berberis, cotoneaster and pyracantha.*
- *Insect attracting plants include buddleia, broom, rosemary, oregano, thyme, catmint, shrub roses and a wild flower mixture.*

In winter, be consistent with the provision of food. If birds have become reliant on the food supplied in your garden, harm could be done if you suddenly stop. It is generally thought unnecessary to stop feeding in the summer. Whole peanuts should not be given as they can choke birds– always supply in a feeder. Remove plastic netting from fat-balls as this can cause injury. Cleanliness is also important. Move hanging feeders about from time to time to prevent the build-up of droppings that encourage disease. Clean the feeders and bird table regularly.

Hedgehogs

Rural populations of hedgehogs have halved since 2000. Gardens provide them with their richest foraging habitat but they need wildlife corridors to cover their home range of 10 – 20ha. Hedges, rather than fencing, provide better access between gardens, but hedgehog friendly fencing with small access holes at ground level is

now also available (or simply cut your own holes c15x15 cm/ 6x6 in). Benson is fortunate to still have a viable population of the nation's favourite wild animal, and we want to encourage measures to support their survival such as avoidance of slug pellets and provision of log piles.

Hedgehogs may hibernate in bonfire piles. You should move your pile to a different area on the day you intend to burn and check for hedgehogs. They will use nesting boxes if provided. Do not feed them with bread and milk as this will give them diarrhoea as are lactose intolerant. Instead, if you wish to feed them, dried mealworms, peanuts and meat-based cat or dog food are recommended. You can also buy hedgehog food from garden centres.

Hedgehogs enjoying dried mealworms. Note nearby water source provided by plant tray.

Ponds

Frogs, toads and newts, are beneficial garden creatures that predate a range of invertebrates. They can be encouraged by providing a pond where tadpoles can develop. At least one side of the pond should gradually slope up to dry land to enable froglets to emerge from the pond. Adult frogs and toads can be encouraged by providing log piles and other damp habitats around the garden.

Preparation

After digging the pond check the cavity for sharp stones before using builder's sand and wet newspapers or old carpet to act as an underlay for the liner. Weigh the liner down at its corners before filling with water. Once full, tuck the liner down into the surrounding soil. If you fill your pond from the mains water supply, leave it for a week before planting to allow chemicals in the water to disperse.

All British amphibians are attracted to prefabricated ponds, however tadpoles cannot get out of sheer sided structures. They wait in vain for conditions to change as they would in the wild, where marshland dries out through natural evaporation. When this does not happen they stay as tadpoles and eventually die.
If the pond has steep sides and it is not possible to provide a sloping edge, a ramp covered in chicken wire in one corner can help. Plants will provide cover to help prevent predation as well as oxygenating the pond and providing habitat for dragonfly larvae and other small creatures that form the base of the food chain.

Common Frog in garden pond

Plants

Marginal plants help to attract beautiful dragonflies and damsel flies.
It is vital that you go native (see list) where planting a pond is concerned. All pond plants grow quite fast and non-natives can be impossible to get rid of once they have taken hold. Avoid Canadian pondweed (Elodea Canadensis), parrot's feather (Myriophyllum Aquaticaum) and fairy moss (Azolla Caroliniana) as these will do more harm than good. Most wildlife, except fish, will find its own way to your pond arrive naturally. Introducing fish will wipe out larvae, tadpoles and young newts.

Floating plants
- *Frogbit Hydrocharis (Morsus-panae)*

Marginal plants
- *Water forget-me-not (Myosotis Palustris)*
- *Water mint (Mentha Aquatica)*
- *Yellow flag (Iris Pseudoacorus)*
- *Flowering rush (Butomus Umbellatus)*
- *Water plantain (Plantago Alisma Aquatica)*
- *Water violet (Hottonia Palustris)*

Plants rooted in deep water
- *Broad-leaved pondweed (Potamogeton Nataris)*
- *White water lily (Nymphaea Alba)*
- *Yellow water lily (Nuphar Luteum/ Lutea)*

Submerged oxygenators
- *Hornwort (Ceratophyllum Demersum)*
- *Water crowfoot (Ranunculus Aquatilis)*
- *Common water starwort (Callitriche Stagnalis)*
- *Spiked water milfoil (Myriophyllum Spicatum)*

If you have space, add a marsh area by your pond. Dig out an area and line it as for a pond but fill it with a mixture of subsoil and washed sand as you don't want the area to be too fertile. Overlap your pond liner into your marsh to enable any overflow to seep into your marsh and keep it damp.

Marshland plants
- *Meadowsweet (Filipendula Ulmaria)*
- *Purple loosestrife (Lythrum Salicaria)*
- *Lady's smock (Cardamine Pratensis)*
- *Gypsywort (Lycopus Europaeus)*
- *Ragged robin (Lychnis flos-culculi)*
- *Marsh marigold (Caltha Palustris)*
- *Rushes and sedges (Juncus and Carex)*
- *Soapwort (Saponaria Officinalis)*
- *Bogbean (Menyanthes Trifoliata)*

As your pond matures, you will need to manage it so that the plants don't take over. In the autumn, as much as 2/3 of plant growth can be removed. Leave this around the pond edge for a few days to allow creatures to crawl back in.

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Red Damselfly sunning itself on the marginal plants

Butterflies and Moths

With the right plants, you could get up to 20 species of butterfly in a Benson garden. These could include: Peacock, Small Tortoiseshell, Red Admiral, Comma, Painted Lady, Holly Blue, Common Blue, Gatekeeper, Orange Tip and Brimstone

Butterflies seek out sunny, sheltered spots, so put your butterfly-attracting plants there.

Moths are declining nationally but more than fifty species are regularly recorded in Benson.

Red Admiral Butterfly on Buddleia

Plants for Butterflies

Butterflies need two types of plant: nectar-sources for butterflies, and food-plants for their caterpillars.
Good nectar-sources are:

- *Buddleia (by far the most popular plant with butterflies - mauve, purple and white are all good), Michaelmas daisy, Lavender, Ice-plant (Sedum spectabile), Marjoram (origanum), Aubretia*

Good caterpillar food-plants are:

- *Stinging nettles (preferably a large clump in a sunny spot, for Peacock, Tortoiseshell, Comma, Red Admiral)*
- *Long grass left uncut until autumn (for Browns)*
- *Lawns that are not just grass (e.g. with Birdsfoot Trefoil for Common Blues)*
- *Garlic Mustard or Cuckoo Flower (for Orange Tips)*
- *Holly and ivy (for Holly Blues)*

Plants for Moths

Plant night-flowering, nectar-rich plants, such as Nicotiana (tobacco plant), Oenothera (evening primroses), summer-flowering jasmines, honeysuckles, Erica cinerea, Silene latifolia and sweet rocket. For day-flying moths choose sea lavender, buddleias, Centranthus rubra and Lychnis..
Provide for moth caterpillars with lady's bedstraw, foxglove, primrose and thyme. Elephant hawkmoth caterpillars also enjoy rosebay willow herb, clarkia and fuchsia.
Native trees and hedges, eg oak, birch, willow, hawthorn and hornbeam also support many moth caterpillars.

Hummingbird Hawkmoth on Verbena

Tips

Caterpillars of the Large and Small "cabbage" butterflies do eat cabbage-family plants, but the similar looking Green-Veined White does not.

Leave fallen fruit in autumn for Red Admirals to sip the juices. Peacock butterflies and Small Tortoiseshells over-winter as butterflies, often seeking shelter in houses. But, these are too warm for them and they are better placed in a cooler shed or garage. Commas and Brimstones over-winter deep in ivy, so leave a good covering for them.

Bees and Other Pollinators

Many species of bumble-bee and other pollinators are fast disappearing due to a lack of suitable habitats - both for shelter and breeding and the excessive use of chemical pesticides.

Look out for the RHS "Perfect for Pollinators" symbol when purchasing plants/seeds for your garden. Action for Butterflies and Bees is a key part of Benson's Strategy for People and Nature.

Bumblebee on Catmint

Foraging habitat

Provide forage throughout the year. Bumblebees can forage up to 2.5km, with considerable differences between species.

Annual plants grown in greenhouses, drenched in insecticides, intensively bred for giant petals and sterile hybrids (no pollen, no scent) are not beneficial to pollinators.

Different bumblebee species have different tongue lengths varying from 5.8mm to 12mm. Provide different flowers for different tongue lengths, for example:

Spring flowers *– Mahonia, Lungwort, Pussy willow, Crocus, Flowering Currant, Bluebell, Bugle, California lilac (Ceanothus), Comfrey, Pieris, Dicentra, Fruit trees,* ***Dead nettles****, Spring heathers,* ***Ground ivy****.*

Early Summer flowers *– Allium,* ***Aquilegia****, Borage,* ***Campanula****,* ***Catmint****, Cotoneaster, Cranesbill, Globe thistle, Poppy,* ***Salvia****, Snapdragon, Sweet pea, Thyme, Viburnum,* ***Foxglove***

Late Summer flowers *– Buddleia, Cornflower, Cosmos, Echinacea,* ***Honeysuckle****, Lavender,* ***Lupin****, Marjoram, Nasturtium, Sedum, Verbena*

Completely black forms of the Bumblebee Bombus Ruderatus often occur alongside banded forms and have been found in Benson. They are late emerging, long-tongued and nest underground with up to 150 individuals. Their preferred plants include: Everlasting pea (Lathyrus latifolius), White Dead-nettle (Lamium album), Marsh Woundwort (Stachys palustris), Black Horehound (Ballota nigra), Comfrey (Symphytum officinale), Red Clover (Trifolium pratense).

Bumblebee Bombus Ruderarius form quite small colonies of 20-50 individuals nesting in tussocky grassland. This is a medium-tongued species preferring complex habitats formed by later stages of succession from grassland to scrub. It forages in flower-rich habitats with early flowering *Lamiaceae* such as White Dead-nettle *(Lamium album*) and Ground Ivy *(Glechoma hederacea),* and *Fabaceae such as Red Clover (Trifolium pratense)* and Kidney Vetch *(Anthyllis vulneraria).*

You can extend the flowering season of some late flowering perennial herbous plants and therefore their benefit to pollinators by giving them a "Chelsea chop" at the end of May/beginning of June. By removing up to a half in length of the top shoots, the side shoots branch out thereby delaying the flowering season and producing more compact plants. Flowers become smaller but more numerous. Plants that respond well to this treatment include:

- *Yellow Chamomile (Anthemis tinctoria)*
- *Coneflower (Echinacea purpurea)*
- *Sneezeweed (Helenium)*
- *Phlox paniculata*
- *Sedum (upright, strong-growing forms such as "Herbstfreude"*
- *Golden Rod (Solidago)*

Provide water for pollinators. Bees and other pollinators sometimes need to drink; having a shallow margin of a pond or a shallow dish filled with stones or marbles and water will provide a safe source of water.

Nesting habitat and overwintering sites

Provide more undisturbed nest and overwintering sites for bees; depending on the species these could be small mammal holes, cavities in trees, bricks or stonework, bird boxes (used by tree bumblebees). Holes under

hedges with plants along the base are favoured by bumblebees. Carder bees are surface nesters that need moss and grass but no raking. Commercially available bumblebee nests generally do not work but solitary bee hotels do; either make your own or you can purchase them. Bees will find their own nest sites, so tolerate the small mounds of soil deposited by the female bees when they excavate their nest tunnels.

Provide refuge from risks such as pesticides and disease.

Trees and Shrubs

Hedges provide living space and food for all sorts of wildlife as well as privacy and security for you. Good native choices include hawthorn, blackthorn, wild rose, holly, hazel and elder. In addition, berberis and pyracantha produce lots of berries for the birds.

Attractive orange and red pyracantha varieties provide berries for the birds.

The following trees and shrubs are beneficial for wildlife:

***Trees**: alder, ash, aspen, beech, birch, wild cherry, crab apple, field maple, hazel, holly, juniper, oak, Scots pine, rowan, yew, whitebeam, willow, wych elm.*
***Shrubs**: alder buckthorn, blackthorn, dog-rose, dogwood, elder, guelder-rose, hawthorn, spindle.*

Other information sources:

There are many sources on-line these days. Some that we have found particularly useful include:

Creating a mini-meadow - Plantlife: http://www.magnificentmeadows.org.uk/assets/pdfs/Mini-meadow.pdf

Gardening for wildlife

Bees, bats, butterflies, birds, moths, amphibians, "Chelsea chop" etc - Royal Horticultural Society: https://www.rhs.org.uk/

Homes for wildlife, birds, ponds, nectar rich flowers, trees, shrubs and hedges, compost)– Berks, Bucks and Oxfordshire Wildlife Trust: http://www.bbowt.org.uk/wildlife/gardening-wildlife

Plants, homes and habitats, lawns, problematic visitors – RSPB: https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/

Pond creation and management – Freshwater Habitats Trust: https://freshwaterhabitats.org.uk/

Gardening for butterflies and moths – Butterfly Conservation: https://butterfly-conservation.org/3114-5576/gardening-for-butterflies-and-moths.html

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