GARDENING FOR BATS

All sixteen species of bats in the UK eat insects, and need a good supply of these from spring through to the autumn. By growing flowers attractive to a range of insects, our gardens can become important feeding stations for bats, birds and other wildlife.

Many plants depend on insects

We grow flowers in our gardens for our own enjoyment. But colour and perfume are really the plants' way of advertising themselves to insects. Sweet nectar and protein-rich pollen are bait to encourage insects to visit. In return, pollen is carried from one flower to another on their bodies so the flowers are fertilised.

Bats need insects

Flying uses a lot of energy, so bats have huge appetites. All our UK bats eat insects. Five species, including the long-eared bat, prefer moths, but most bats rely more heavily on flies as food than any other insect group. Especially important are craneflies, and a range of midge families and their relatives. Pipistrelles, the bats most likely to visit your garden, depend on catching very large numbers of tiny insects, some of which are pests.

Flower shape and insect tongues

Flowers with long narrow petal tubes, such as evening primrose and honeysuckle, are visited by moths and butterflies. Only their long tongues can reach deep down to the hidden nectar.

Short-tongued insects include many families of flies and some moths. They can only reach nectar in flowers with short florets.

By planting a mixture of flowering plants, vegetables, trees and shrubs, you can encourage a diversity of insects to drop in and refuel.

Follow these general rules

? Plant flowers varying not only in colour and fragrance, but also in shape.

? Daisies and daisy-like flowers are open with a mass of shallow florets.

? Pale flowers are more easily seen in poor light.

? Single flowers have more nectar than double varieties

? Native wild flowers or those closely related are most useful

? Flowers with landing platforms and short florets such as daisy or carrot family attract many insects.? Many flowering vegetables such as beans and courgettes are also good for insects.

Plant trees and shrubs

These are important in providing

- food for insect larvae
- food for adult insects
- shelter for flying insects

• roosting opportunities for bats.

In a small garden, choose trees that can be coppiced – cut down to the ground every few years - to allow new shoots to spring from the base. Young shoots and leaves will support leaf-eating insects, even if they do not produce flowers. Hawthorn and elder are useful small trees.

Create a wet area

A pond, a marshy area, even a half-tub made into a mini-pond can attract insects. Many of the tiny flies favoured by bats start life in water as aquatic larvae.

Say NO to insecticides

Chemical pesticides kill natural predators and so may do more harm than good. They reduce bats' insect prey, and surviving insects carry traces of poison.

Encourage natural predators

Hoverflies, wasps, ladybirds, lacewings, ground beetles and centipedes are the gardener's friends. As natural predators they help keep the balance, eating many pests.

? Allow some weeds to grow to provide ground cover for natural predators

? Grow favourites of hoverflies and other predators close to the flowers and vegetables that tend to become infested.

? Leave hollow-stemmed plants to overwinter as shelter for ladybirds.

? Leave heaps of dead leaves and brushwood undisturbed for hedgehogs.

? Most garden birds are effective predators. Provide them with regular food and water.

Prevent a CATastrophe

Many bats and other small mammals fall prey to Britain's most dangerous four-legged predator, the domestic cat. Cats do not need to stay out all night. Bring you cat in an hour before sunset so bats can emerge undisturbed.

(Send for our special leaflet on cats and bats.)

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Gardening for bats

Aim at having flowers in bloom through the year, including both annuals and herbaceous perennials.

Below are some suggestions, but this is by no means an exhaustive list. See what grows well in YOUR garden, and what seems most attractive to insects. Flowering times are approximate, varying in different areas. Regular dead-heading extends flowering period in many flowers. A=annual, HA=hardy annual, HHA=half-hardy annual, P=perennial, W=wild flower,

Flowers for borders	Flowers for borders					
St John's Wort	Hypericum	Р	March-			
marigolds	Calendula	H/A	March – Oct.			
aubretia	a. delltoidea	P	March-June			
honesty	Lunaria rediva	HB	March			
forget-me-not	Myosotis sp.	A/P	March - May			
elephant ears	Bergenia	P	April			
Wallflowers	Erysimum	В	April - June			
Cranesbills	Geranium sp	P				
	Achillea	P	May – Sept.			
Yarrow	Papaver sp.	-	May -			
Poppies	Hesperis matronalis	A P	May - July			
Dames violet		-	May - August			
Red Valerian	Centranthus ruber	Р	May – Sept.			
Poached egg plant	Limnanthes	HA	June – Aug.			
Knapweed	Centaurea nigra	Р	June- Sept.			
Phacelia		HA	June – Sept.			
Ox-eye daisy	Leucanthemum vulgare	Р	June – Aug.			
Evening primrose	Oenathera biennis	В	June-Sept.			
Candytuft	Iberis umbellata	HA	June – Sept.			
Sweet William	Dianthus barbatus	В	June - July			
Blanket flowers	Gaillardia	Р	June -			
Verbena	V.bonariensis	HHA	June – Oct.			
Scabious	knautia arvensis	Р	July-Aug.			
Night-scented stock	mattiola bicornia	HA	July-Aug			
Pincushion flower	Scabious sp.	A/P	July – Sept.			
Cherry pie	heliotrope	HHA	July – Oct.			
Mexican aster	Cosmos sp.	A/P	July – Oct.			
Cone flower	Rudbeckia sp.	A/P	August-Nov.			
Mallow	lavatera sp.	Р	August-Oct.			
Michaelmas daisy	Aster sp.	Р	August-Sept.			
Ice plant 'Pink lady'	Sedum spectabile	Р	Sept.			
	Herbs – both leaves and flowers are fragrant					
Fennel	Foeniculum vulgare		July – Sept.			
Bergamot	Monarda didyma		June - Sept			
Sweet Cicely	Myrrhis odorata		April - June			
Hyssop	Hyssopus officianlis		July - Sept			
Feverfew	Tanacetum parthenium	June – Sept.				
Borage	Borago officinalis	May – Sept.				
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Rosemary		Rosemary officinalis		March - May		
Lemon balm		Melissa officinalis				
Coriander		Coprianrum sativum		June - August		
Lavenders		Lavendula sp.		Ŭ		
Marjoram		Origanum sp				
Trees, shrubs and climbers important to insects						
Oak			large gardens only			
Silver birch	Betula pendula					
Common alder	Alnus glutinosa		Suitable for coppicing			
Hazel	Corylus avellana		Suitable for coppicing			
Elder	Sambucus nigra		Small			
Pussy willow	Salix caprea		Suitable for coppicing			
Hawthorn	Crataegus monogyna		Suitable for coppicing			
Honeysuckle	Lonicera sp.		grow a variety for succession.			
Dog rose	Rosa canina		Climber			
Bramble	Rubus fr	ruticosus	Climber			
lvy	hedera helix		Climber			
Buddleia	Buddleia davidii		shrub			
Guelder rose	Vibernum opulus		shrub			
Gorse	Ulex sp.		shrub			
Plants for pond edges and marshy areas						
Purple loosestrife	Lythru	m salicaria	W	June – Aug.		
Meadow sweet	Filiper	ndula ulmaria	W	June – Sept.		
Lady's smock	Carda	mine pratensis	W	April - June		
Water mint	menth	a aquatica	W	July – Sept.		
Angelica	Angeli	ica sylvestris	W	July – Sept		
Hemp agrimony	Eupate	orium cannabinum	W	July – Sept.		
Marsh marigold	Caltha palustris		W	March – May		
Creeping Jenny	Lysima	achia nummularia	W	May - August		
Fringed water lily	Nympl	hoides peltata	W	June – Sept.		
Water forget-me-	Myosc	otis scorpioides	W	June – Sept.		
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Allow part of your lawn to grow long in summer and cut in autumn, removing the clippings. Avoid using fertilizers. Compost heaps are good producers of insects too.

Add a seat to watch your garden come to life!