Conserving beneficial insects in the garden:

Ladybird Houses & Bumblebee Nests

Gardeners' friends: ladybirds and bumblebees

These insects are among the most useful and beneficial creatures which share our gardens and vegetable plots: both play vital roles in the ecology of these habitats which we manage for pleasure and producing food.

Ladybirds, with their voracious appetite for aphids (greenfly and blackfly) are natural bio-control agents of these pests.



A pair of seven spot ladybirds copulating on a nettle leaf. © Ken Preston-Mafham, Premaphotos Wildlife

Bumblebees, with their long tongues, are excellent pollinators of a wide range of garden flowers and culinary herbs. They are also the most important pollinators of vegetables such as broad and runner beans.

The **ladybird house** and **bumblebee nests**, available from the Oxford Bee Company Ltd, can help the gardener committed to green principles to attract these beneficial insects to the garden.

Both are made from environmentally friendly plastic and come with full instructions for their deployment.



Bombus terrestris, Buff-tailed bumblebee worker with well filled pollen baskets on knapweed.

© Ken Preston-Mafham, Premaphotos Wildlife

How do they work?

Both products mimic vital habitat requirements for ladybirds and bumblebees.

Ladybirds spend their days on plants, eating aphids. In the mild summer months they roost at night on the plants, either under leaves or sometimes in flowers. However, in the cold and sometimes frosty nights of early spring, they seek shelter under dead leaves, loose bark, dense grass tussocks and other similar sites. They also hibernate over winter in such places.

Each of the Oxford Bee Company Ltd ladybird houses contains hundreds of perches where ladybirds can roost over night or hibernate through the winter. By providing this kind of shelter, the gardener can enhance his local population of these useful control agents for aphids.





Bumblebees nest, according to species, in old mouse nests in hedgerows and woodland edge or in dense grass tussocks. They also frequently nest in cavities in old compost heaps.

produced Modern agriculture has а landscape which is no longer very beegreatly reduced with resources and destruction of nest sites. Since the 1940's there have been steady declines in the number of old, flower-rich meadows and we have lost hav 160,000km of hedgerows in Britain. Remaining hedges are often rendered unattractive to bumblebees by being regularly and severely trimmed and, for this reason, domestic gardens, with their contrived floral diversity, are often the best local habitats for bumblebees.

The Oxford Bee Company Ltd bumblebee nests will enable gardeners to provide that vital and declining resource: safe nest sites. Each nest comprises a doublechambered box which meets the basic requirements of a bumblebee colony: a dry, protected cavity with room for colony growth through the season. The smaller outer chamber forms a vestibule that provides a sheltered buffer zone between outside weather and a protected, central core chamber where developing brood can be reared. The inner chamber comes supplied with a ball of upholsterer's kapok which the bees tease out to form an insulated nesting medium in which they build and provision wax cells for food storage and brood rearing.



A bumblebee colony is founded in spring by a single queen which

mated in the previous year and which has spent the winter in hibernation. She secretes wax from glands in her abdomen with which to make storage pots or cells for pollen and honey and also to lay eggs that eventually hatch into grub-like larvae which feed on the stored food.

Eventually, these larvae become adult bees, the first generation of sterile females or workers. These gradually take over the tasks of cell building and foraging for food, while the queen concentrates on egglaying and rarely leaves the nest.

By mid-summer, after two or three generations of workers, the first and only generation of males is produced, together with new queens. The males leave the nest and spend their time feeding at flowers and seeking queens with which to mate.

Once she has mated, a queen spends some time feeding to build up sufficient fat body to see through the long period of hibernation. Queens seek out cavities under loose bark, dense grass tussocks or large deposits of dead leaves in which to hibernate. A favourite place is under thick growths of ivy leaves on deeply fissured tree bark or growing on sheltered walls.

After a long period of winter dormancy, the first warm days of spring bring the queens out of hibernation and they can be seen flying slowly up and down hedgerows and around gardens, seeking a suitable cavity in which to start the colony cycle anew.



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Chris O'Toole has written many books on insect natural history including Bees of the World (with Anthony Raw), Alien Empire and The Red Mason Bee.