

Gardening with Nature

Make garden pests a thing of the past

Our garden has hardly any slug and snail damage, infestations of aphids are few, no gooseberry bushes are defoliated by sawfly. And yet we use no garden chemicals whatsoever, not even ones approved for organic use.

How do we achieve this? There is no mystery. The key is simply to manage your garden in a way that will maximise habitats for beneficial wildlife, thereby restoring the natural balance of nature. In time (and it will take time) myriads of natural food chains, of predator eating prey, insect eating insect, bird eating insect, re-establish themselves throughout the garden, and almost every 'pest' is controlled by its natural enemies. This is no pipe-dream of organic gardening books. It really does work!

This applies to all gardens

we are not just referring to specialist 'wildlife gardens'. The principles we espouse apply to all gardens, whatever their design. When I refer to habitats in the garden, we don't just mean features that resemble something you might see in the countryside. Everything in a garden is habitat for some creature.

Diversity in structure as well as in planting

A mixture of trees, large shrubs, smaller shrubs, perennials, trailing plants or ground cover plants, mown grass, long or rough grass, banks, embankments or dry stone walls, hedges, 'deadhedges', woodpiles, logs, and ponds ; the more of these structural features you can incorporate the better, as all are habitats for different species of invertebrates, many of which have quite distinctive requirements.

The more invertebrate species your garden can accommodate the better, because diversity leads to stability. You will also be providing a food source for many kinds of birds.

Don't tidy your garden in Autumn

Perhaps the hardest piece of advice for the conventionally-trained gardener to accept, because that autumn clear up, making everything 'neat and tidy', is almost second nature. But it is a big mistake to do this. It is crucial for the survival of garden life over winter that dead stems are left, and dead leaves which fall upon flower beds are left to form a natural covering to the soil. The importance of doing this cannot be over-emphasised. Some dead stems break down of their own accord over winter. Just leave them where they lie.

Any dead stems which need to be cut away (because they get in the way of next year's growth) should be cut in March or April, just before the new growth appears. Room should be found somewhere to leave a stack of cut dead stems permanently, as many beneficial insects (such as ladybirds) use them as nesting or hibernation sites. The only things to clear away in autumn are dead stems which have fallen across paths, and piles of leaves on lawns or paths where they could become slippery and form a hazard. (Don't burn autumn leaves – put them on flowerbeds, or in a container to decay).

The best pest controllers

Our garden management is designed to make the garden as friendly as possible for the following:

1. Frogs and toads

Both of these, but especially toads, eat quantities of slugs, snails and adult vine weevil beetles. Vine weevil larvae are those tiresome grubs you find in the soil of potted plants eating the roots. Toads are one of the main natural predators of the adult vine weevil beetle.

To encourage frogs and toads you need:

- dense permanent plantings of perennials or ground-covering plants (not bare earth or concrete) so they can travel around the garden safely hidden from their enemies;
- piles of logs or bricks under which they can hide;
- a wildlife pond (i.e. a pond without fish) where they can breed.

2. Garden birds

Many birds, but especially blue tits and great tits, are a wonderful aphid control. They can be seen during the winter meticulously going up and down the stems of garden plants finding and eating the overwintering forms of all kinds of aphids. This prevents plagues of aphids occurring in the spring or early summer. Essential for a viable bird population is plenty of 'cover' (dense, preferably thorny hedges or small trees such as hawthorn, blackthorn or pyracantha) where they can roost and nest safely and out of sight their various enemies. If you are a cat-owner, give your cat a collar with a bell – it helps to warn birds.

3. Hoverflies

They look like small wasps or bees, but are stingless, and hover in front of flowers. Most of them feed on nectar which they take from flat or bowl-shaped flowers such as those of the buttercup, daisy and umbellifer families. Their larvae look like tiny slugs and they voraciously eat aphids. Many common wild flowers, especially lawn flowers such as buttercups, dandelions and hawkweeds, are an ideal source of food for adult hoverflies. It is well worth finding room for these in your garden – perhaps a piece of lawn or grassland which you leave uncut during the summer to allow these plants to flower. Tubular or 'lipped' flowers of the sort which attract bumblebees (i.e. sage, lavender, deadnettle, etc.) are of no use to hoverflies, nor are 'double-flowered' garden varieties.

4. Ground beetles and other ground-living invertebrates

By leaving a permanent ground cover of plants or dead leaves, all sorts of small creatures will be encouraged, - many of these are carnivorous and will eat slug and snail eggs. Of course conventional gardening books tell you to rake up this leaf litter because it encourages slugs and snails – but that is only when the natural balance had been disrupted. Give it time, and the natural predator-prey balance will re-establish.

5. Other beneficial insects

In fact most insects are beneficial to gardeners – only a tiny proportion of insects in Europe are 'pests', and most of these only become 'pests' when the natural balance is disrupted.

Cherish your soil

Soil itself is alive with millions of tiny organisms. They lie at the bottom of the food chain, and are very important. Most are so small they can only be seen with a microscope. Chemical fertilizers will upset the natural balance of these organisms in the soil.

Much of our garden is not fed, and where we do feed we use our own home-made compost.

We dig as little as possible (apart from our vegetable patch). Over time a network of beneficial underground fungi called mycorrhiza builds up, so long as chemicals are not used and the soil is not dug. Mycorrhiza form a partnership with the roots of other plants, and help them to take up nutrients.

They also are believed to give plants some resistance to fungus diseases. Trying not to dig the soil also creates fewer opportunities for weeds (which like disturbed ground) to appear.

Our approach doesn't work for everything.

This approach works 95% of the time. Here are three cases where further intervention is necessary:

- ☞ wood pigeons – it is necessary to protect brassicas with nets, or the pigeons eat them;
- ☞ red lily beetle – it has to be removed by hand as it seems to have no natural predators;
- ☞ codling moth (causes grubs in apples and pears) – lays more eggs than there are blue tits to eat them, so pheromone sticky traps are helpful.

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