



Advice Sheet

Controlling Slugs and Snails

Slugs and snails are the number one enemy for many gardeners, especially those who grow their own vegetables. They are vulnerable to drying out, especially slugs which have no shell to protect themselves, so need cool damp places to hide in during the day. At night they emerge to feed, which they do using their rasping tongue. As they travel around they leave behind a trail of glistening mucus, this trail can be followed by other slugs, so you may find many of them on a single unlucky plant. Snails need a supply of calcium to build their shells, so are more common on chalky or limey soils.

First the Good News

Not all the slugs and snails in your garden are harmful. There are many different species, and some live entirely on dead and decaying material so they do a good job tidying up detritus. The largest slugs you find in the garden are harmless to your plants and vegetables. The most damaging to growing plants are the common garden snail and the small grey-white slugs.



The great grey slug is no threat to gardeners. It feeds on dead and decaying material, so helps recycling garden waste. It can often be found in compost bins.

Slugs and snails are eaten by many other animals. Hedgehogs, frogs, toads, ground beetles and many birds will eat large numbers. Small slugs are also taken by centipedes, harvestmen and other mini-beasts. Thrushes are well known for eating snails, using a favourite rock, or even a section of garden path, to smash the shells. There are many ways to attract these helpful animals into your garden, but the best are to have a wildlife friendly garden pond, and to avoid using any pesticides at all. Bringing in a community of predators will help to control other pests such as aphids.

The Bad News

There are no easy solutions. You will probably have to try several of the methods listed here before you find what works best in your garden. It is impossible to completely eliminate these pests, but their numbers can be greatly reduced. Encouraging a balanced garden community, with plenty of mollusc predators, takes time. But it is possible to have a garden that looks good, and grow plenty of vegetables, even with a few slugs present.



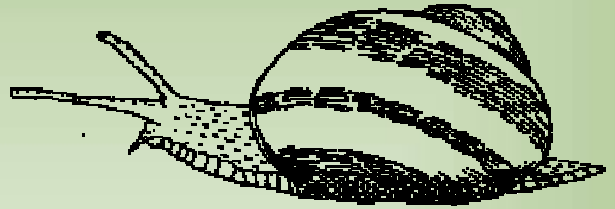
The small grey and brown slugs do most damage to tender young plants



What you can do

Grow plants which are less attractive to molluscs, such as those with tough leaves or spiny leaves, or herbs with strong scents. Slugs prefer soft tender young growth, and seem to have definite favourites. If you have lots of slugs or snails it may be better to avoid the most vulnerable plants, or give them extra protection. Most ornamental grasses and ferns seem to be safe.

In the vegetable garden, choose resistant varieties wherever possible. Some potato varieties are known to be more resistant to slug damage. These include Kestrel, Charlotte, Pentland Dell and Pentland Squire. The longer potatoes are in the soil the more likely they are to be damaged, so early varieties are a good bet if you have a big slug problem.



Slugs move by gliding along on their muscular foot. The foot is soft and sensitive, so they don't like to cross sharp or irritating surfaces. Try surrounding vulnerable plants with sharp sand, gravel, broken eggshells, wood ash, soot or pine needles. Whatever you use needs to be generously applied, in a circle right up to the plant stem, not just a ring, as slugs can travel underground and come up inside the ring. The barrier material may need replacing from time to time. It is now possible to buy slug-repellent granules, these are made from a highly porous substance which absorbs all the mucus the slug produces as it moves. Without this mucus the slug is unable to move easily, so will go elsewhere.

Grow vulnerable plants, such as hostas, in pots where they can be better protected. Cover the compost in the pot with one of the slug-repelling materials listed above. Smear a thick band of Vaseline or engine grease around the rim of the pot. A slightly more attractive option is a thin adhesive copper strip, now available at gardening suppliers, which works by giving a slight electric shock.

Slugs need cool damp places to hide in during the day. Remove any weeds or rubbish from around the vegetable patch which might give them shelter.



Snails often collect in shady crevices, such as behind paving slabs. Once exposed they can be collected, or left for a friendly thrush to deal with. In winter they can congregate in large numbers in good hibernation sites, so a thorough search sometime during the winter can significantly reduce the spring snail population.

Slugs love comfrey. A pile of comfrey leaves placed on the vegetable plot will soon attract large numbers of slugs, especially in damp weather. After a few days the comfrey and slugs can be collected up and composted. A few comfrey leaves can also be used as a decoy close to vulnerable plants.

Put down slug refuges – empty grapefruit halves, old cabbage leaves etc. After a few days these can be collected and any slugs inside disposed of.

The very smallest plants are the most vulnerable. Plant out vegetable seedlings instead of sowing direct into the vegetable patch, and grow more seedlings than you need, to have some spare to replace any casualties. Before planting out try one of the above methods to reduce the local slug population.



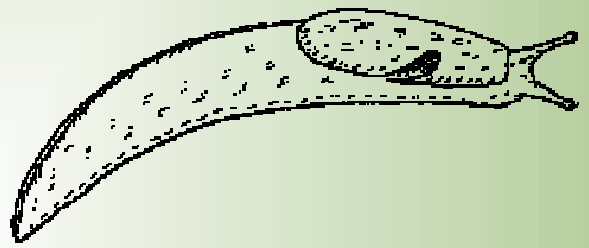
Rings cut from plastic drinks bottles can be placed around seedlings to protect them. A layer of slug-repelling grit inside the ring will make it even more effective.

Saucers of beers are a classic way to tempt and drown slugs. Beer can also be used in tin cans sunk into the ground, and if the top is slightly above ground level slug-eating ground beetles are unlikely to fall in. To protect a large vegetable plot you will need several traps, to increase the chance of a slug finding a trap.

Slugs and snails are most active at night, and prefer damp conditions. On a damp evening, go round the garden with a torch and a bucket and collect as many as you can by hand. This is very effective and you may be shocked by how many you find.

Avoid creating the cool moist conditions slugs like by watering plants in the morning rather than the evening (be careful watering during the middle of the day as some plants can scorch in hot sunshine). By nightfall, when slugs become active, the soil surface will have dried out

Look out for snail eggs when cultivating the soil, clusters of translucent spheres 1-2 mm across. If exposed to the air they will dehydrate, or be snapped up by a hungry bird. Regular hoeing around vegetables keeps weeds down and makes the top layer of soil into a dry dusty surface which slugs will find difficult to cross.



If you still have problems...

Slug pellets are poison, and are dangerous to pets and small children. They can be placed under a rock or saucer but there is still a risk they can be discovered and eaten. Not all slugs coming into contact with slug pellets die, and it is not known what effect eating a poisoned slug has on a predator such as a hedgehog. The use of slug pellets cannot be recommended.

There is now a biological control for slugs. This is a nematode, or eelworm, which attacks slugs, infecting them with a lethal disease. The control is supplied as a culture, which is then made up into a solution and watered onto the soil. To be effective it needs to be applied when the soil is warm and damp. Because it only works within the soil it is not effective against snails, which stay on the surface. But it will work against juvenile slugs, which live underground, giving you several weeks of protection.

For more information contact Cheshire Wildlife Trust, Bickley Hall Farm, Bickley, Malpas, SY14 8EF.
Phone 01948 820728
Or visit our web site www.wildlifetrust.org.uk/cheshire