

Ground cover plants – out-compete the weeds

When people take up gardening, whatever methods they use, their usual aim is to grow a range of plants very few of which would usually be found wild on their land. It is, of course, wise to try and use those species that are best adapted to the conditions of the particular site but, gardeners being gardeners, we generally want to try and grow a wider range of plants than this. Of course, this means that these plants are at a general disadvantage on the site and the tendency is for the native plants to re-establish themselves. Thus begins the long preoccupation with weeding, the constant battle to maintain those plants we want to grow at the expense of the plants that want to grow there.

There are many ways of trying to control weeds. We can remove them by hoeing them out or by burning them with a flame gun. We can try to prevent them growing by putting down mulches. Each of these methods have their advantages and disadvantages and each has situations where they are applicable. In this leaflet we will look at another method of controlling weeds - by growing carefully selected plants that can spread to cover the ground and that will out-compete the weeds

Like other forms of weed control, ground cover has its advantages and disadvantages. Its primary advantages include:-

1. By covering the ground with a carpet of vegetation it prevents the germination of weed seeds.
2. When established, it prevents the ingress of perennial weeds.
3. It protects the soil from erosion and water loss. This can be particularly useful on steep slopes.
4. It acts as an insulating cover for the soil, keeping it cooler in the summer and warmer in the winter.
5. It is a living mulch that helps to build up humus levels in the soil.
6. It provides habitats and cover for beneficial insects and other predators.
7. It can be very attractive.
8. It can provide us with various other commodities - food, medicines etc.

The disadvantages include:-

1. It can provide a habitat for slugs, snails and other pests. This is to a large extent mitigated by the beneficial creatures it also encourages, but it is best not to grow slug-susceptible plants in a ground cover if you normally have a problem with slugs.
2. It can compete with other plants for food and water.
3. If the ground cover is too vigorous it can overrun the plants you want to grow.

So long as the above factors are taken into account, it is possible to choose ground cover plants that will greatly reduce the work-load of weeding whilst also benefiting the other plants you want to grow.

One important point to remember about ground cover is that it is only an effective weed-suppressor once it is established. In virtually all cases you need to plant into a soil that is free from perennial weeds, and you need to weed the plants until they are established (usually 1 - 3 growing seasons).

Spring is a good time for planting most of the species mentioned below. Planting distances depend upon the vigour of the plants - very fast-growing species can often be planted as much as 1 metre apart whilst slower plants might need to be 15cm apart. Most ground covers spread quite freely and can be divided so it is a simple matter to build up a good stock of plants within a few years.

Ground cover can be used in various situations. It is probably pre-eminently suitable under and around trees and shrubs and there is a very wide range of plants that can be used in such situations. Another good use is as a companion for bulbs. Lilies, for example, like the cooler soil conditions created by the ground cover and can easily grow through the carpet of vegetation. Steep banks are another suitable position. The root system of the plants help to bind the soil and this, together with the foliage, prevents soil erosion. Ground cover can also be used with herbaceous perennials, though greater care is required here in the choice of plants in order to make sure that they do not out-compete the perennials. There are also successful methods of using ground cover with annuals (the Bonfilles method of growing cereals for example) though in general we have found ground cover and annuals do not do well together.

Now we come to a list of species that can be used for ground cover. We have information on over 250 species that can be used (and we have normally only included those species that have additional uses) so we can only include a few of them in this leaflet. We do produce a check-list of all the ground-cover plants and this can be obtained for 6 x first class stamps from the address at the end of this article.



Arctostaphylos uva-ursi: Bearberry is an evergreen shrub growing about 10cm tall and eventually 1 metre wide. A good plant for sunny banks, it requires an acid soil. The fruit is edible.



Asarum canadense: This low-growing herbaceous species does well in a woodland, it is also good under shrubs in the garden. It requires a humus-rich soil. The root can be used as a ginger substitute. *A. caudatum*, *A. europaeum* and *A. shuttleworthii* can be used in the same way.



Campanula poscharskyana: A low-growing evergreen herbaceous plant, this lovely little Harebell spreads very rapidly to form a very good cover in a sunny position. The mild-flavoured leaves can be harvested all year round to be used in salads. *C. portenschlagiana* can be used similarly, we do not yet know if this species is deciduous or evergreen.



Chamaemelum nobile: Chamomile is a delightful herb to grow in the garden, the cultivar 'Treneague' is a non-flowering form that remains compact and spreads slowly to form a good ground cover in a sunny position (it is sometimes used as a lawn). It needs quite a bit of weeding until it is established, and occasional weeding even when established. Chamomile is a superb companion plant, enhancing the health of plants growing close to it. Many species of bulbs grow well through the

chamomile.



Chrysosplenium alternifolium: Golden saxifrage is a native perennial for the bog garden. It prefers a shady position, doing well in wet woodland. About 30cm tall, it creeps slowly to form a good carpet. The leaves are nice in salads. *C. oppositifolium* is a similar species with the same uses.



Cornus canadensis: Creeping dogwood is a perennial that grows well in light acid woodlands, including amongst conifers. The fruit has a pleasant taste though it is not highly flavoured. Our native *C. suecica*, the dwarf cornel, has similar uses.



Empetrum nigrum: The crowberry is a native evergreen shrub growing about 30cm tall and spreading slowly. It requires an acid soil and does well in exposed positions. The fruit is not highly flavoured but is acceptable after a frost. Most other members of this genus can be used in a similar way.



Fragaria species: There are many species of strawberry that can be used for ground cover. Some of them have exquisitely flavoured fruits, though they are somewhat smaller than the cultivated strawberries and are often not borne freely. My favourites are *F. moschata* and *F. viridis*. They grow best in a sunny position in a well-drained soil but do tolerate some shade. They spread very freely by runners, quickly forming a dense mass of vegetation and swamping out any small plants.



Gaultheria shallon: Shallon is an evergreen shrub that grows about 1.2 metres tall. It does well in acid soils and under coniferous trees. The fruit is very freely borne and has a pleasant flavour. *G. procumbens*, Wintergreen, only grows about 15cm tall and spreads fairly quickly in moist acid soils in shade or semi- shade. The fruit has a remarkable flavour, tasting like germolene - some people love it, others are less sure! An essential oil from this plant is used in the linament 'Oil of Wintergreen'.



Hosta species: Most, if not all, hostas can be used for ground cover. They vary in height and width and all do well in woodland conditions (where they produce better foliage but don't flower so well) as well as in sunny positions (where they flower better but the leaves can get scorched). The plants are rather susceptible to slug damage. The petioles (leaf stems) can be eaten raw or cooked, they are somewhat

fibrous but have a sweet flavour.



Houttuynia cordata: This is a rampant-growing herbaceous plant, though it dies right down in the winter. It succeeds in moist and wet soils as well as in shallow water. The leaves have a very strong scent of oranges and can be used in salads. Sometimes they have a pleasant flavour, at other times the same plants are not so pleasant. We are not sure of the reasons for this. There are a number of very ornamental forms with multi- coloured leaves.



Liriope graminifolia: This evergreen perennial is about 30cm tall. It is rather slow to spread but eventually forms a good dense cover in a shady position and is drought tolerant. We have not yet tried eating this species, but the root is said to be eaten in China and Japan, where it is also used medicinally. Other members of this genus can also be used.



Mahonia aquifolium: Oregon grape is a very easily grown evergreen shrub about 1.5 metres tall that tolerates most soils and positions, even dense shade. It spreads slowly by suckers. The plant produces edible flowers in late winter, the fruit is ripe in late summer and, though somewhat acid and full of seeds, is quite pleasant eating. *M. repens* is very similar but lower growing and spreading more rapidly.



Montia sibirica: Pink purslane is a short-lived evergreen perennial about 20cm tall that self-sows freely and forms a dense ground cover. It can succeed in sunny positions and even in the dense shade of a beech wood. The leaves can be eaten in salads.



Origanum vulgare: Oreganum is a very dense growing plant for sunny positions, it makes a good ground cover though it is slow to spread. An excellent flavouring for cooked foods and salads, it is also a very good companion plant and is said to repel insect pests. The sub-species *O. vulgare hirtum* comes from Greece and is more aromatic.



Peltaria alliacea: Garlic cress tastes just like its name suggests. The plant is evergreen and the leaves can be used as a flavouring in salads or cooked foods,

though it turns more bitter in the summer. The plant is about 20cm tall and spreads slowly. It prefers a light soil and a sunny position.



Prunus laurocerasus: Cherry laurel is an easily grown evergreen shrub succeeding in sun or in the dense shade of trees and in most well-drained soils except shallow chalk. It can have a negative effect on nearby plants, however, and I would only use it under mature trees. Some low-growing forms such as 'Otto Luyken' make good ground cover plants. The very ripe fruit, which has a jelly-like texture and usually also a sweet taste and a pleasant flavour, can be eaten in moderation. However, if there is also a bitterness present then no more than a few fruits should be eaten. This bitterness is due to the presence of the same glycosides that give almonds their characteristic flavour. Whilst in small quantities they can be beneficial for the respiratory and digestive system, in larger quantities they can be toxic.



Pulmonaria officinalis: Lungwort is an evergreen perennial about 30cm tall, growing best in the light shade of a woodland. It is slow to spread but makes a good weed-excluding carpet of vegetation. It is sometimes cultivated as a medicinal herb, the bland-flavoured leaves can be added to salads.



Rubus species: There are several members of this genus that can be grown for ground cover in sun or light shade and can also provide edible fruits. Our favourite is *R. nepalensis*, the Nepalese raspberry. This evergreen plant is only about 10cm tall but spreads freely to form a good carpet. The fruit is ripe from late July to September, somewhat smaller than the cultivated raspberry it has a pleasant acid flavour. Best in light shade, it will often be deciduous in exposed positions and is not hardy in the colder parts of the country. *R. illecebrosus*, the strawberry raspberry has a large fruit that looks delicious but is rather bland. The plant is about 15cm tall, it spreads freely but dies down in winter. Other species worth trying include *R. calycinoides*, *R. parvus* and *R. tricolor* (this last species is very vigorous and should not be used with small plants).



Sedum species: There are many members of this genus that can be used as low ground cover for sunny positions. They are all very drought tolerant, growing well on hot dry banks, and all the species mentioned here are evergreen. Their leaves are edible raw or cooked, but they are not the most appetizing leaves I've ever eaten. The following are worth trying. *S. acre*, *S. album*, *S. spathulifolium* and *S. spurium*.



Thymus species: The Thymes make very good ground cover in well-drained sunny positions, they are very drought tolerant. Regular consumption of the leaves is said to prolong your life by increasing the life of the body's cells. The following species can be added to salads or cooked foods - *T. praecox*, *T. serpyllum*, *T. vulgaris* and *T. x citriodorus*. This last, the lemon thyme, is my personal favourite, the leaves have a lovely lemon flavour.



Vaccinium vitis-idaea: The cowberry is an evergreen shrub for acid soils. It succeeds in full sun or in light shade in a coniferous woodland. Rather slow at first, it will eventually be about 30cm tall and up to 1 metre wide. The acid flavoured fruit, which is said to taste better after a frost, is used like cranberries. *V. praestans* is a deciduous member of the genus with a fairly large delicious fruit that tastes somewhat like a strawberry. It is about 15cm tall, spreading slowly by suckers, and growing well in a moist acid soil in a shady position.



Vinca minor: Periwinkle is an evergreen native shrub growing about 30cm tall and spreading freely when established. A superb ground cover, it succeeds in sunny positions and also in dense shade. The pliable stems can be used in basket making and the plant has many valuable medicinal properties. *V. major* has similar uses.



Viola species: Several members of this genus can be used in sunny positions. They have mild-flavoured edible leaves and flowers, these are quite mucilaginous and can be used as thickeners in soups and stews in much the same way as okra is used. The following are worth trying. *V. cornuta*, *V. labradorica* and *V. obliqua*.

The following books are recommended for further reading on the subject of ground cover.

- Plants for Ground Cover. This is a very comprehensive book written by G. S. Thomas and published by J. M. Dent and sons. Its ISBN is 0-460-12609-1.
- Ground Cover Plants. This handy little booklet from the Royal Horticultural Society was published by Cassells in 1989. Its ISBN no. is 0-304-31089-1