On the march

The spreading habit of some perennials can be a worry in tight spaces, but their inherent nature can bring about pleasing plant combinations.

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An attractive intermingled planting with blades of Acorus gramineus 'Ogon' filling the gaps between Pulmonaria and Bergenia.

The creeping nature of Euphorbia amygdaloides var. robbiae makes it useful for ground cover.

An effective combination of two vigorous spreaders: dark-leaved Lysimachia ciliata 'Firecracker' and variegated ground elder (Aegopodium podagraria 'Variegatum').

The reason why Physalis alkekengi var. franchetii runs in garden borders is evident when it is dug up.
comment often heard about certain plants is 'I'm sorry I ever let that thing into the garden' - yet another gardener might say of the same plant, 'I like the way it fills up the spaces between the other plants'. This suggests that plants that can run might be both a good and bad thing.

There are two methods by which plants propagate themselves: by seed and by vegetative means. Perennials in particular often develop shoots or roots that go on to produce new plants at some distance from the parent. Whether these species have problem-solving potential, or conversely present a danger, is down to what the gardener wants to achieve.

Spreading shoots

Many garden perennials spread by means of stems that grow horizontally close to or just below the soil surface (rhizomes), growing only a few centimetres a year and developing new shoots, leaves and roots along their length. A few, such as strawberries and periwinkles (Vinca), send out long, arching stems known as 'stolons' which root at their tips where they land. A third type produce long underground rhizomes (often referred to as 'running rhizomes') that last two or three years – they show good 'persistence'. Some produce a tighter pattern of spread and persistence. Others produce more shoots at ground level, rooting as they go, growing 2–5cm (¾–2in) a year and, crucially, frequently branching to form a classic 'phalanx' clump. Shooting stems seem to live for three years but as they die, new ones will take their place, so the clump stays dense, with no place for weeds to grow and compete within it.

Examples:
- Alchemilla mollis
- Alstibe hybrids
- Pulmonaria officinalis
- Aster novae-angliae
- Rudbeckia fulgida var. sullivanti 'Goldsturm'

Different spreading mechanisms

Clumps:
That increase uniformly
How a plant will perform long-term in the garden depends on a number of factors: length of runners, rate of spread, pattern of spread and persistence.

● Length of runners and rate of spread: some species may produce a few, long underground runners. Such plants will build up to form clumps. But slowly and erratically with odd plants popping up amid neighbours, a habit shown by Euphorbia griffithii. Those which produce more of these long runners will clearly spread more quickly and occupy ground more consistently.

● Pattern of spread: using rather military language, ecologists recognize a gradient of behaviour between 'phalanx' spreaders (which march out on all fronts to form an approximately circular clump) and 'guerillas' (which send out long stems in random directions). It is 'guerilla' spreaders that most often make gardeners anxious.

● Persistence: most perennials produce growth (basal spreading shoots or rhizomes) that lasts two or three years – they show good 'persistence'. Some produce a tighter underground woody structure which can live for much longer. A few, however, produce growth that is little more than annual, which can be problematic for gardeners, as new shoots have to find a suitable territory quickly – if not the plant will die out. This seems to lie behind why many Monarda cultivars do not survive in some gardens, and why many new Astilbe cultivars fail, especially on heavier soils.

Rapid spread with numerous shoots combined with persistence makes for dominance, such as Lysimachia punctata. A number of other species also dominate empty territory through the creation of a mass of roots following on from 'guerilla' spread. Anemone x hybrida cultivars are highly regarded late-season border perennials that appear to take their place for several years but, just as the gardener is

Euphorbia cyparissias can run rampant in the garden (right), spreading by long rhizomes (left).
Spreading plants

beginning to give up hope, they suddenly expand their clumps. During those years the plants have been building up large root systems, which once established are famously unstoppable. Many Symphytum (comfrey) species also do this, but more rapidly. Both they and anemones are among the most likely survivors to be found in abandoned borders.

Pleasing associations

Perennials that spread need not necessarily be feared. Most exploit gaps without persisting so strongly that they exclude others. In many cases the apparently random appearance of shoots of a ‘guerilla’ spreader among established clumps adds a welcome touch of naturalness and spontaneity. A particularly effective example is Lysimachia ciliata ‘Firecracker’: its rich brown shoots dotted around spring borders are an excellent foil for yellow daffodils and a complement to darker-flowered hellebores. It has none of the long-term persistence or the all-conquering tendencies of its relative, L. punctata; it seems ‘Firecracker’ is quite unable to penetrate those perennials that form more solid clumps, such as Geranium, Pulmonaria or Aster.

The comparatively few perennials that spread and hold territory and therefore dominate their neighbours can be immensely useful for places such as steep banks, out-of-the-way corners or difficult-to-access areas. Here they can be used to suppress weeds and provide colour and interest among unmown grass or shrubs. Even the most despised ‘thugs’ can have their uses once you get to understand their growth habits. With thanks to the European Regional Development Fund, Howards Nurseries and Orchard Dene Nurseries.

www.rhs.org.uk For more on plants that are potential nuisances, search ‘Garden thugs’ at the RHS website.

12 July, RHS Garden Wisley: Noel Kingsbury will lead a full-day, garden-based workshop on the long-term performance of perennials; visit www.rhs.org.uk/rhseventfinder

Dominant spreaders:
clumps with runners

Example:
*Lysimachia punctata*

There are few plants that can be thrown out of a car window into a ditch and take root – and be found years later as clumps of bright yellow flowers several square metres in extent. This old cottage-garden favourite is one of the few non-native perennials that can establish itself in the face of the strong competition of our native grass flora.

Since it so clearly follows up spreading with a strongly persistent presence it is worth noting. Every year many new rhizomes around 8cm (3in) long are produced, following a pattern that is midway between ‘phalanx’ and ‘guerilla’. The next year’s growth is consolidated by the production of a large number of smaller roots, which completely dominate the soil, and the formation of a dense, almost woody rhizome. The resulting mass is almost impenetrable by any other plant, making this species strongly dominant.

Similar plants: *Acanthus mollis* *Sinacalia tangutica* *Symphytum officinale* *Trachystemon orientalis*

Lysimachia punctata

new branching roots arising from shoots developed in the previous season form part of the mass of shoot and root growth within the clump

The spreading habit of Ceratostigma plumbaginoides (left) can be seen even in a nursery pot (right).