Selecting Landscape Plants: Groundcovers

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Introduction

Landscapes are composed of plants that form ceilings, walls, and floors spaces. Groundcovers serve as attractive carpets of foliage that cloak and beautify our landscape "floors" (fig. 1). A groundcover is a low-growing plant species -3 feet tall or shorter — that spreads to form a relatively dense layer of vegetation. In covering bare soil, groundcovers reduce soil erosion and provide habitat for insects and other animals, along with a host of other positive environmental effects.



Figure 1. *Pachysandra terminalis* bed. All photographs are by the author.

Some groundcovers are suited to foot traffic. Turfgrass species, the most common groundcovers, are good examples of walk-on groundcovers. Turfgrass, a lush green uniform carpet, is the quintessential groundcover. However, turfgrasses require a relatively high light exposure and frequent mowing in addition to other potential maintenance practices such as dethatching; aerating; fertilizing; and controlling weeds, insects, and diseases.

There are numerous nonturfgrass groundcover species that require relatively few inputs (maintenance activities such as pruning and fertilizing) in order to maintain an attractive foliage mat. However, unlike turfgrass, most groundcover species are intolerant of foot traffic. Some groundcover species tolerate foot traffic, and they will be noted in an upcoming section. The following sections address general groundcover topics to give the reader the insights and decision-making information to select an aesthetic living carpet that will flourish in the specific conditions of their landscape. Several groundcover species will be described in detail with descriptions of their appearance and cultural requirements (e.g., sun exposure and soil conditions). An additional list (without details) is also provided.

Groundcover Classifications

Groundcovers can be classified into groups based on several criteria, the most important being height, foliage persistence, method of spread, growth rate, and aesthetic characteristics.

Plant Height

A groundcover, sometimes classified as a small shrub, is generally regarded as a plant shorter than 3 feet tall. Of course, this size designation is somewhat arbitrary, but it serves as a general category of plants with a low stature. An important aspect of plant height is that short (1 foot or shorter) groundcovers are generally more prone to weed infestation than tall groundcovers. This is because a relatively short groundcover permits more light to penetrate the groundcover canopy, making weed seeds more likely to germinate and prosper. Conversely, tall groundcovers are less prone to weed infestation because less light penetrates the canopy.

Foliage density, irrespective of plant height, also impacts the likelihood of weed infestation. Foliage persistence (discussed next) also affects the likelihood of weed infestation. Plants that do not maintain year-round foliage — such as deciduous woody species that lose their leaves in the fall — and most herbaceous perennials, whose aboveground plant parts die in the cold season, are more likely to be invaded by weeds.

Foliage Persistence

The majority of groundcovers offered in garden centers are evergreen species — plants that retain foliage throughout the year — such as the Japanese pachysandra (*Pachysandra terminalis*; fig. 2). However, there are groundcover species that are not evergreen. Examples of these are (1) deciduous woody perennial species such as some low-growing cotoneaster



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Figure 2. Pachysandra terminalis foliage.



Figure 3. Cotoneaster adpressus 'Little Gem' plant.



Figure 4. Hosta bed.

species (*Cotoneaster adpressus*; fig. 3) whose leaves fall off in autumn but stems persist, and (2) herbaceous perennials such as Hosta (*Hosta* spp.; fig. 4) in which shoots (above ground stems) die in the autumn, and shoots regrow from roots the following spring. The choice of an evergreen, woody perennial, or herbaceous groundcover depends on your preference and landscape situation. Despite the lack of foliage during winter, the advantage of considering nonevergreen species is that you greatly increase the number of potential groundcover choices that offer a variety of sizes, forms, colors, and textures.

Method of Spread

There are several ways that a groundcover can spread to fill in an area:

- 1. Growth of lateral branches.
- 2. Side branches develop roots when they come in contact with the soil and subsequently produce new shoots.
- 3. New plants (offshoots) produced at the base of the mother plant.
- 4. New shoots produced from underground stems (rhizomes) or aboveground trailing stems (stolons, runners).
- 5. New shoots produced from roots (suckers).

Caution must be made in selecting groundcovers that spread by suckers, rhizomes, or stolons because such species may spread (either slowly or quickly) beyond their intended boundaries. Hence, they are difficult to keep in bounds unless a barrier that does not allow stems or roots to escape to surrounding bed space borders them. An example of this is Chameleon Houttuynia (*Houttuynia cordata* 'Chameleon'; fig. 5), a plant that will quickly invade adjacent beds by means of underground stems (rhizomes).



Figure 5. *Houttuynia cordata* 'Chameleon' foliage (leaves wet from rain).

Growth Rate

Because uncovered soil is more prone to weed problems, a groundcover with a fast rate of spread is usually desirable to minimize weed invasion. An area that is quickly covered by a groundcover is less prone to soil erosion, which is especially important on slopes. Relatively large areas (more than approximately 100 square feet) require species that fill in relatively quickly. If a groundcover has a slower rate of spread, then plants can be installed at a closer spacing (spacing is covered in an upcoming section). Of course, this makes the groundcover project more expensive and laborious. The size of area to be covered will play an important role in the choice of groundcover species. Plant growth rate will be contingent on how well the cultural requirements of the selected species are matched to the site conditions (e.g., soil, light, water).

Spacing

The number of groundcover plants to install per unit area depends on the growth rate of a particular species, the amount of time you want a planting area to be completely filled by foliage, and your budget. Groundcovers with relatively fast growth rates can be planted with a wider spacing because they will grow together in a short period of time. A wider spacing will result in fewer plants per unit area than a close spacing, so the project will be less expensive and require less planting labor. Conversely, plants that have a relatively slow growth rate will require a closer spacing unless you are willing to wait for the plants to grow together. As previously mentioned, a wide spacing for plants with a slow growth rate will be subject to weed infestation because weed seeds are more likely to germinate in open space than in space shaded by a groundcover.

Aesthetic Characteristics

The foliage and flower characteristics of groundcover species vary greatly. Interpretation of plant aesthetic features is mostly a subjective feature, so the desired foliage and flower characteristics need to be determined. In addition to the previously mentioned evergreen and non-evergreen foliage, some groundcover species have variegated foliage (leaves with colors other than green). Other groundcovers have showy flowers. Additional aesthetic characteristics include year-round appearance (foliage color throughout seasons and winter appearance), plant texture (visual smoothness or roughness of foliage/branching pattern), and plant form (upright or prostrate).

Plant Culture

Cultural Requirements

The site conditions of the area chosen for groundcover will determine the species appropriate for that area. A great amount of variety in landscape sites' conditions — such as temperature extremes (especially summer and winter), light, water, and soil — are important aspects to be considered when selecting a groundcover species. For example, some groundcover species require shade, others require full sun, and some will thrive in full sun or full shade.

Soil aspects are also important because groundcovers may have particular soil requirements. If so, you may need to know the soil texture (relative clay, silt, and sand contents). Soil texture is important because it influences aeration (pore space between soil particles; roots need oxygen) and water drainage/retention. Thus, soil type will impact the frequency of irrigation during plant establishment or in periods of drought. Soil texture also has a major influence on root growth. For example, root growth can be slow in soils with a high clay content.

In some cases, soil pH (how acid or alkaline a soil is) may be important. A soil test will supply the soil's pH and nutrient status (see Virginia Cooperative Extension publication 452-129, Soil Sampling for the Home Gardener; www.pubs.ext. vt.edu/452/452-129/452-129_pdf.pdf). The soil test will also provide information on amendments (if needed) to adjust the pH, as well as recommended fertilizer amounts. Paying attention to site conditions and matching the species to the conditions will greatly improve the success of your groundcover planting.

This article does not discuss whether a species is prone to being eaten by deer. However, if you have deer pressure, you should know whether a species is prone to deer damage.

Groundcover Suggestions

There are numerous groundcover species that can be used in the landscape. Several evergreen, deciduous woody perennial, and herbaceous perennial species and their characteristics follow.

Evergreen Groundcovers

Aaronsbeard St. Johnswort (*Hypericum calycinum*) - Zones 5 to 8

Aaronsbeard St. Johnswort spreads by aboveground stems to form a 16-inch-tall groundcover (fig. 6). When located in the U.S. Department of Agriculture's Plant Hardiness Zone 7 and higher (fig. 7), this species is evergreen; in zones 6 and lower, it is semievergreen or deciduous. This species has handsome blue-green foliage (fig. 8) and showy yellow flowers in the summer (fig. 9). It does best in a full-sun to part-shade exposure and will tolerate less-than-ideal soil conditions. If the foliage is winter-damaged or becomes unkempt, mowing will rejuvenate its appearance.



Figure 6. Slope covered with Hypericum calycinum.

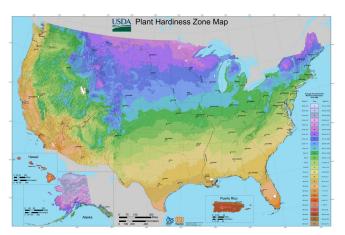


Figure 7. U.S. Department of Agriculture's Plant Hardiness Zone Map. Source: USDA.



Figure 8. Hypericum calycinum foliage.



Figure 9. Hypericum calycinum flower.

Bearberry Cotoneaster (*Cotoneaseter dammeri*) – Zones 5 to 7

Bearberry Cotoneaster is a relatively fast-growing species that will grow to about 2 to 3 feet tall (fig. 10). It has a sprawling growth habit that gives it a "wild" look. This species has small leaves and showy white flowers (fig. 11) followed by a fair showing of red fruit. As with most Cotoneasters, Bearberry Cotoneaster is generally tolerant of adverse conditions (e.g., drought and poor soil).



Figure 10. Cotoneaster dammeri bed.



Figure 11. Cotoneaster dammeri foliage and flowers.

The cultivar 'Coral Beauty' is very popular in the garden center trade because it is superior to seedling-grown plants. There are two cultivars of Willowleaf Cotoneaster (*Cotoneaster salicifolius*; zones 6 to 7) worth mentioning: 'Repens' (fig. 12) and 'Scarlet Leader' are about 3 feet tall and have arching, cascading branches and narrow, 2-inch-long leaves that turn purplish in winter.



Figure 12. Cotoneaster salicifolius 'Repens' foliage and flowers.

Common Periwinkle (Vinca minor) - Zones 4 to 8

Common Periwinkle is a handsome, low-growing (about 4 inches tall) groundcover (fig. 13). This species has 1-inchlong elliptic leaves borne on its trailing stems, and it sports attractive, 1-inch-diameter blue-violet flowers in late winter/ early spring (fig. 14). Many cultivars of this species vary in flower and foliage characteristics. For example, 'Gertrude Jekyll' has white flowers and small leaves (fig. 15), and there are a few cultivars that have variegated foliage (fig. 16). Common Periwinkle performs best in well-drained soils and a part-shade exposure. Plants will grow, but not flourish, in full sun. As with other relatively short groundcovers, weed infestation may be a problem.

NatureServe (www.natureserve.org/explorer/) has Common Periwinkle listed as an invasive species with a low impact rank — a categorization of its negative impact on biodiversity.



Figure 13. Vinca minor bed.



Figure 14. Vinca minor foliage and flowers.



Figure 15. Vinca minor 'Gertrude Jekyll' foliage and flower.



Figure 16. Vinca minor with variegated foliage.

Large Periwinkle (*Vinca major*; zones 6b to 9) is similar to Common Periwinkle with the exception that it has larger leaves and flowers and is less hardy (may be subject to winter foliage damage in zones \leq 6b). The cultivar 'Variegata' has variegated leaves (fig. 17) and is also commonly used as a cascading element in hanging baskets. NatureServe lists Large Periwinkle as an invasive species with a medium impact rank.



Figure 17. Vinca major 'Variegata' foliage and flowers.

Creeping Juniper (*Juniperus horizontalis*) – Zones 4 to 9

Garden centers offer several cultivars (clones) of Creeping Juniper that vary in height (from 4 inches to about 2 feet) and in foliage color (from green to blue-green to silver-blue; some cultivars take on a purplish color in the winter). 'Blue Rug' (also known as 'Wiltonii') is a low-growing form with beautiful silver-blue foliage (purplish in winter) that only grows to about 5 inches in height (fig. 18). The low, flat stature of 'Blue Rug' has a very two-dimensional appearance, similar to turfgrass. Its shallow depth also makes it prone to weed infestation. Like most junipers and other conifers, this species is relatively droughttolerant and requires a well-drained soil and a full or mostly full sun exposure. The Icee Blue clone is similar to 'Blue Rug' but has foliage that is very silvery blue (fig. 19). 'Plumosa' is a flat mound form that gets about 2 feet tall and has blue-green to gray-green foliage (purplish in winter).



Figure 18. Juniperus horizontalis 'Blue Rug' bed.



Figure 19. Juniperus horizontalis Icee Blue bed.

Dwarf Nandina, Dwarf Heavenly Bamboo (*Nandina domestica* dwarf cultivars) – Zones 6b to 9

There are several cultivars of Dwarf Nandina that are shorter than 3 feet and make excellent groundcover (fig. 20). These cultivars spread by underground stems (rhizomes) and suckers (shoots off the root system); however, spacing between plants should be about 3 feet or less because dwarf plants are not fast growers and will take a considerable amount of time to produce shoots that fill in the spaces between plants. Foliage of new shoots (fig. 21) and winter foliage are reddish, and the extent of this coloration depends on the particular cultivar and the amount of sun exposure (more sun causes more red color). Nandina can tolerate full-sun to full-shade exposures and are tolerant of poor soil (except wet soil) as well as hot and dry conditions. Some dwarf clones (3 feet or shorter) are 'Atropurpurea Nana', 'Firepower' (or 'Fire Power'), 'Gulf Stream', Harbour Belle, 'Harbour Dwarf', 'Umpaqua Chief', 'Umpaqua Princess,' and 'Wood's Dwarf'. The nandina species has been labeled an invasive species, especially in the Southeast U.S.; it has a NatureServe invasive plant impact rank of high/low. However, the dwarf types tend to produce fewer flowers, and hence, less fruit than the species or taller cultivars. 'Firepower', 'Gulf Stream', Harbour Belle, and 'Habour Dwarf' have been documented (research from the University of Florida) as nonfruiting cultivars that do not pose an invasive plant risk.



Figure 21. Nandina domestica Moon Bay form and foliage.

English Ivy (Hedera helix) - Zones 4 to 9

English Ivy is a commonly used groundcover (fig. 22). While it has several attributes that make it a very effective and desirable groundcover (e.g., glossy, dark green foliage; tolerant of adverse conditions; and will flourish in full-shade to near full-sun exposures), this species is generally regarded as an invasive species. NatureServe's invasive impact rank for this species is high/medium and it notes that it is especially a problem in the Pacific Northwest. English Ivy maintained as a groundcover will not flower and produce seed because it will remain in a



Figure 22. Hedera helix bed.



Figure 20. Bed with Nandina domestica Moon Bay.



Figure 23. Hedera helix as groundcover and vine.

juvenile stage (has lobed leaves, nonflowering). Once the plant encounters a vertical surface and begins to climb (fig. 23), it will enter into a mature stage (will produce nonlobed leaves) and begin to flower and set seed. Occasionally, an older groundcover planting (15 or more years) will produce mature foliage and set seed without growing in a vertical orientation.

Japanese Garden Juniper (*Juniperus procumbens* 'Nana') – Zones 4 to 7

Japanese Garden Juniper is a wide-spreading, somewhat slow-growing species that grows to about 18 inches tall (fig. 24). The beautiful green-blue foliage is needle-like and sharp to the touch; the foliage is a dull green in winter. The overall carpet effect is quite beautiful. Like most Junipers and other conifers, this species is relatively drought-tolerant and requires well-drained soil and a full or mostly full sun exposure.



Figure 24. Juniperus procumbens 'Nana' bed.

Japanese Pachysandra (*Pachysandra terminalis*) – Zones 5 to 9

Japanese Pachysandra forms a beautiful carpet of short, vertical stems covered in lustrous green foliage (fig. 25). In early spring, white flowers are produced at the tips of stems (fig. 26); these flowers are somewhat showy on close inspection (within 10 feet). This groundcover spreads by rhizomes (underground stems) and will steadily make its way into surrounding bed space unless it is confined by a barrier. Japanese Pachysandra does best in light- to full-shade exposures; the plants languish in full sun. It also needs a well-drained soil and is not suited to heavy clay soils. There is a variegated cultivar, 'Varietgata', that has attractive silver leaf markings (fig. 27); however, this cultivar will occasionally revert to the green foliage characteristic.

Allegheny Pachysandra (*Pachysandra procumbens*), native to the Southeast U.S., is a relatively slow-growing, clump-forming groundcover (figs. 28, 29). With time, it makes a beautiful groundcover for part-or full-shade exposures and well-drained soils with ample moisture. This species has larger leaves (which gives them a coarser texture) than Japanese Pachysandra, and its leaves become mottled with age. Alleghany Pachysandra is evergreen in the southern parts of its range (zones 7 to 9) but is



Figure 25. Pachysandra terminalis bed.



Figure 26. Pachysandra terminalis foliage and flowers.



Figure 27. *Pachysandra terminalis* 'Variegata' foliage and flowers.



Figure 28. Pachysandra procumbens bed.



Figure 29. Pachysandra procumbens foliage.

deciduous in the upper parts of its range (zones 5 to 6). Short, attractive white flower spikes are produced in early spring (fig. 30). This species is infrequently found at garden centers and is relatively expensive because of its slow-growing nature.



Figure 30. Pachysandra procumbens flowers.

Russian Arborvitae (*Microbiota decussata*) – Zones 2 to 8

Russian Arborvitae is a 2-foot-tall groundcover with a low, flat, mound form (fig. 31). The fine-textured foliage is green in the growing season and brown-maroon in winter (fig. 32). Some references state that this coniferous species tolerates shade; however, the plant tends to perform poorly in shady exposures. This species tolerates heat, drought, and poor soils but does not tolerate poorly drained soils that are typically moist or wet.



Figure 31. Microbiota decussata plant.



Figure 32. Microbiota decussata winter color.

Shore Juniper (Juniperus conferta) – Zones 6 to 9

Shore Juniper, a conifer like the two previous species, grows to about 18 inches tall and has blue-green, needle-shaped foliage and somewhat trailing branches. The most popular cultivar is 'Blue Pacific' (fig. 33); this cultivar has blue-green foliage in the growing season (dull green in winter). In addition to the full sun and well-drained soil culture, this species tolerates sandy soils and salt exposures (from seaside environments or road salt).



Figure 33. Juniperus conferta 'Blue Pacific' bed.

Deciduous Woody Plants

Climbing Hydrangea (*Hydrangea anomala* subsp. *petiolaris*) – Zones 4 to 7

While Climbing Hydrangea makes a superb vine (fig. 34), it also useful as a groundcover (fig. 35). This species will grow in full-sun to full-shade exposures. Large, relatively showy flowers (fig. 36) are produced in June, primarily in sunny exposures. Plants are initially slow to spread but will do so at a moderate rate in about three years. Stems will produce roots when they come in contact with the soil; such rooting will increase plant establishment and, hence, the rate of spread.



Figure 34. Hydrangea anomala subsp. petiolaris vine on fence.



Figure 35. Hydrangea anomala subsp. petiolaris as groundcover.

Herbaceous Perennials

Hosta, Plantain Lily (*Hosta* spp.) – Zones 3 to 7/8 (depends on cultivar)

Hosta make a lush, almost tropical-looking groundcover display (fig. 37). There are thousands of registered Hosta cultivars, and hundreds are offered in the garden center/mail order trades. A full discourse on Hosta garden use, including only the popular cultivars, would consist of a treatise-type publication. Briefly, Hosta vary greatly in their size (small and delicate to large and bold), growth rate (slow to fast), leaf size (a few inches to more than a foot long), leaf color (shades of green, blue, and yellow as well as numerous variegated patterns and colors), and leaf textures (with or without pronounced leaf veins). Examples of some of these characteristics are seen in figures 38 to 42.



Figure 38. Large-leaved Hosta cultivar with prominent veins and flowers.



Figure 36. Hydrangea anomala subsp. petiolaris flower cluster.



Figure 39. Hosta 'Guacamole' with variegated foliage.



Figure 37. Hosta cultivars used as a groundcover.



Figure 40. Hosta 'Majesty' with variegated foliage.



Figure 41. Hosta 'Frances Williams' with variegated foliage.



Figure 42. Hosta 'Patriot' with variegated foliage.



Figure 43. Hosta with showy flowers.

Hosta flourish with ample soil moisture but will survive a mild drought; supplemental irrigation is generally recommended for dry periods. Most cultivars do best in part or full shade, but some do well in full sun or mostly full sun. Yellow-leaved Hosta will require at least a few hours of sun to produce yellow leaves (leaves will be green in the shade).

The leaf color of some yellow-leaved Hosta cultivars are influenced by temperature. The foliage of viridescent Hosta will initially be yellow but turn green with increasing temperatures as the growing season progresses since more chlorophyll (the green pigment in plants responsible for photosynthesis) is produced at higher temperatures. Cultivars that start out yellow and turn green include 'Dancing Queen', 'Dawn's Early Light', 'Fire Island', and 'Nancy'.

The foliage of lutescent Hosta will initially be green but will turn yellow as the growing season progresses because less chlorophyll is produced at higher temperatures. Lutescent cultivars that start out green but turn yellow with time include 'August Moon', 'Daybreak', 'Faith', 'Golden Scepter', 'King Tut', 'Solar Flare' and 'Sum and Substance'. Some Hosta cultivars are noted for their showy flowers (figs. 43, 44) and some cultivars are noted for fragrant flowers.

The main pest problem for Hosta is a slug infestation; slugs will transform leaves into Swiss cheese-like tattered appendages (fig. 45). However, there are many slug-resistant cultivars.

After about six years, you may need to divide hosta to promote shoot growth. Division is easily accomplished by digging up plants at any time of the year and cutting the clump into portions with a sharp garden spade or knife. Divisions can then be replanted to enlarge your hosta planting or you can share divisions with fellow gardeners.

Liriope (Liriope spp.)

There are two species of Liriope (pronounced lur-RYE-oh-pee) used in the landscape trade: Big Blue Lilyturf and Creeping Lilyturf. Both species grow to about 1 to 2 feet tall (depending



Figure 44. Hosta with showy flowers.



Figure 45. Hosta foliage with slug damage.

on cultivar) and have coarse, grass-like foliage (fig. 46). Most types do best in partial to full shade, but there are sun-tolerant cultivars. Both species are also relatively tolerant of adverse conditions (e.g., hot and dry) and have small but numerous flowers in summer that collectively make a nice flower show.

Big Blue Lilyturf (*Liriope muscari*, recently renamed *Liroipe playphylla*); – Zones 6 to 9/10

Big Blue Lilyturf has both clump and spreading types. Spreading types are best suited to a groundcover use, whereas clumpforming types are best suited as an edging species as well as a groundcover use. Common clump-forming cultivars include:

- 'Big Blue' Green leaves, showy blue flowers; full sun to full shade (fig. 47).
- 'Evergreen Giant' Taller than other big blue lilyturf (to 2 feet tall); stiff-textured leaves, white flowers.
- 'Gold Band' Wide leaf blades with yellow edges, lavender flowers.
- 'Green Midget' One of the smallest cultivars.
- 'Lilac Beauty' Showy flower clusters late in season.
- 'John Burch' Foliage with a thin yellow margin, lavender flowers.
- 'Majestic' Dark green foliage, deep lilac flowers; vigorous grower.
- 'Royal Purple' Green leaves, dark purple flowers.
- 'Samantha' Green leaves, pink flowers.
- 'Silvery Sunproof' White and yellow striped foliage, purple flowers; tolerates sun better than other variegated cultivars.
- 'Variegata' Leaves with cream-colored stripes, very showy lavender blooms; tolerates full sun to full shade (fig. 48).

Common cultivars of the spreading types of Big Blue Lilyturf include:

- 'Samantha' Vigorous; dark green foliage, pink flowers early in season.
- 'Tidwell's Big Blue' Vigorous; green leaves, lilac flowers; full sun to full shade.

The second species of Liriope is Creeping Lilyturf (*Lirope spicata*; zones 6 to 9/10) consist mostly of the spreading types. The common types include:

- Creeping Lilyturf *Lirope spicata* (fig. 49).
- 'Franklin Mint' Green leaves, pale lavender flowers.
- 'Silver Dragon' Narrow green with white striped leaves (often reverts to green in shade); smaller and less vigorous than other types; full sun to full shade.



Figure 46. Liriope bed with flowers.



Figure 47. Liriope muscari 'Big Blue' foliage.



Figure 48. Liriope muscari 'Variegata' foliage.



Figure 49. Liriope spicata foliage.

Walk-On Groundcovers

There are several species of low-growing herbaceous groundcovers that tolerate foot traffic. The amount of foot traffic, from light to heavy, depends on the species. Many garden centers sell groundcovers that tolerate foot traffic. The Under a Foot Plant Company, which markets Stepables[®], has focused its product line on such plants. Its website (www.stepables.com/ default.asp) lists and describes the many species that tolerate being stepped on, along with the their foot traffic rating (light, one to two times per week; moderate, one to two times per day; and heavy, three or more times per day).

Examples of some of these groundcovers, with foot traffic rating in parentheses, are:

- Chocolate Chip Ajuga (moderate; *Ajuga* 'Chocolate Chip'; fig. 50)
- Miniature Golden Sweet flag (light; *Acorus gramineus* 'Minimus Aureus'; fig. 51)
- Variegated Ground Ivy (light; *Glechoma hederacea* 'Variegata'; fig. 52)
- Bronze Dutch Clover (moderate; *Trifolium repens* 'Atropurpureum'; fig. 53)
- Golden Creeping Speedwell (moderate; *Veronica repens* 'Sunshine'; fig. 54).



Figure 51. Acorus gramineus 'Aureus' foliage.



Figure 52. Glechoma hederacea 'Variegata' foliage.



Figure 53. Trifolium repens 'Atropurpureum' foliage.



Figure 50. Ajuga 'Chocolate Chip' foliage.



Figure 54. Veronica repens 'Sunshine' foliage.

Other Groundcover Species

| Common name | Scientific name | Hardiness zones |
|--------------------------------|------------------------------------|--------------------|
| Evergreens | | |
| Asiatic Jasmine | Trachelospermum asiaticum | 7 to 10 |
| Bearberry | Arctostaphylos uva-ursi | 2 to 6 |
| Confederate or Star Jasmine | Trachelospermum jasminoides | 7 to 10 |
| Creeping Mahonia | Mahonia repens | 5 to 9 |
| Crinkle-leaf Creeper | Rubus calycinoides | 6 to 10 |
| Green Santolina | Santolina virens | 7 to 10 |
| Heaths | Erica spp. | Depends on species |
| Helleborus | Helleborus orentalis | 3 to 8 |
| Houseleek, Hens and Chicks | Sempervivum spp. | Depends on species |
| Ice Plant | Delosperma spp. | Depends on species |
| Lavendar Cotton | Santolina chamaecyparissus | 6 to 9 |
| Japanese Star Jasmine | Trachelospermum asiaticum | 7 to 9 |
| Mountain Lover | Paxistima canbyi | 3 to 7 |
| Strawberry Begonia | Saxifraga stolonifera | 7 to 10 |
| Sedum | Sedum spp. | Depends on species |
| Scotch Heather | Calluna vulgaris | 4 to 6 |
| Sedge | Carex spp. | Depends on species |
| Sweetbox, Himalayan Sarcococca | Sarcococca hookeriana var. humilis | 6 to 8 |
| Wall Germander | Teucrium chamaedrys | 4 to 9 |
| Wild Ginger | Asarum canadense | 3 to 7 |
| Wintercreeper Euonymus | Euonymus fortunei | 5 to 8 |
| Deciduous woody species | | |
| Creeping Cotoneaster | Cotoneaster adpressus | 4 to 7 |
| Rockspray Cotoneaster | Cotoneaster horizontalis | 5 to 7 |
| Virginia Creeper | Parthenocissus quinquefolia | 4 to 9 |

Table 1. Other suggested groundcovers.

| Common name | Scientific name | Hardiness zones |
|-------------------------------|------------------------------------|------------------------------|
| Deciduous woody species cont. | | |
| Herbaceous Perennials | | |
| Barrenwort | Epimedium spp. | Depends on species |
| Bugleweed | Ajuga reptans | 3b to 9 |
| Canadian Wild Ginger | Asarum canadense | 4 to 7 |
| Candytuft | Iberis sempervirens | 5 to 7 |
| Carpathian Bellflower | Campanula carpatica | 3 to 8 |
| Coral Bells | Heuchera sp. | Depends on species |
| Creeping Phlox | Phlox subulata | 3b to 8 |
| Daylilly | Hemerocallis spp. | 3 to 10, depends on cultivar |
| Dwarf Plumbago | Ceratostigma plumbaginiodes | 4 to 9 |
| Foamflower | Tiarella cordifolia | 3 to 8 |
| Lady's Mantle | Alchemilla vulgaris | 3 to 7 |
| Lamb's Ear | Stachys byzantina | 4 to 7 |
| Moneywort | Lysimachia nummularia | 3 to 10 |
| Plumbago | Ceratostigma plumbaginoides | 4 to 9 |
| Speedwell | Veronica spp. | 3 to 9 |
| Spotted Deadnettle | Lamium maculatum | 5 to 9 |
| Sweet Wwoodruff | Galium odoratum | 5 to 9 |
| Thyme | Thymus spp. | 4 to 9, depends on species |
| Variegated Goutweed | Aegopodium podograria 'Variegatum' | 3 to 9 |
| Verbena | Verbena spp. | Depends on species |

 Table 1. Other suggested groundcovers. (cont.)