



## Groundcovers for New Hampshire

By Emma Erler, Education Center Program Coordinator

Groundcovers are fairly low-growing plants that cover the soil with an abundance of stems and leaves. Turf grass is easily the most widely planted groundcover in the landscape, though it isn't typically categorized that way. In gardening, the term "groundcover" typically applies to vigorous perennial plants that are used in planting beds. Too often, gardeners and landscapers rely on mulch to cover the soil and prevent weed growth. Yet, there is no need for mulch to be the main feature of a planting bed when there are plenty of tough groundcover plants that can do the job just as well or better.

### Benefits of Groundcovers

Groundcovers are not only attractive, but are useful in a variety of situations and provide a number of benefits, such as:

- Suppress weed growth
- Decrease nutrient leaching during heavy rainfall
- Reduce soil erosion, especially on slopes
- Require less maintenance once established
- Provide cover and forage for pollinators and other wildlife

### Plant Selection

Before choosing a groundcover, you need to establish its purpose and the site conditions where it will be planted. Groundcovers are often used as a lawn alternative in areas that are difficult to mow, or are too shady for grass to grow. They can also be a lower maintenance planting option compared with a standard annual and perennial flowerbed. Next, consider whether the area is mainly sunny or shady, the soil is wet or dry, and which planting zone it is in. Aim to match plant growing requirements with the conditions of the site. Lastly, choose plants based on how much maintenance you are willing to do, growth habits, and aesthetics.

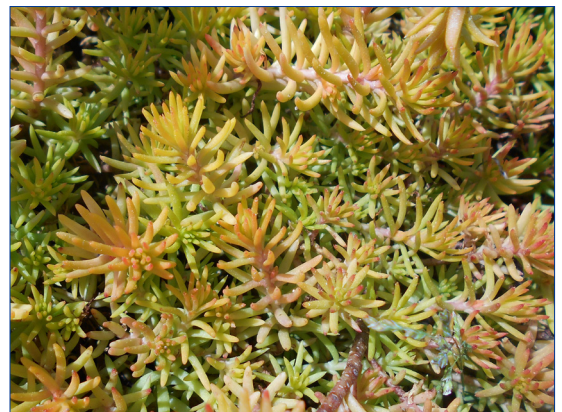
Some groundcovers are extremely aggressive and may creep into lawns, gardens and natural areas unless carefully managed. Some historically common groundcovers have been added to the New Hampshire Prohibited Invasive Plant Species List or the New Hampshire Plant Species Watch List and should not be planted. These include: creeping Jenny (*Lysimachia nummularia*), common periwinkle (*Vinca minor*), bishop's weed (*Aegopodium podagraria*) and winter creeper

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Creeping juniper (*Juniperus horizontalis*)



Stonecrop (*Sedum rupestre* 'Angelina')

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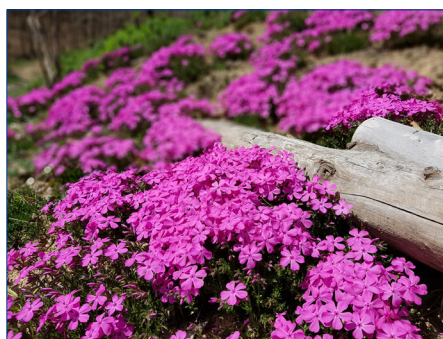
**The best time to plant groundcovers is in the spring or fall when temperatures are mild and precipitation is more frequent. Summer planting is possible, but frequent watering is a necessity during hot, dry weather.**

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Cranesbill (*Geranium macrorrhizum*)



Moss Phlox (*Phlox subulata*)

euonymus (*Euonymus fortunei*). Though not prohibited in the state, a few other plants have similar invasive tendencies and should only be planted in places where their spread is limited by sidewalks or buildings, such as English ivy (*Hedera helix*), lily of the valley (*Convallaria majalis*), spotted deadnettle (*Lamium maculatum*) and chameleon plant (*Houttuynia cordata*).

### Planting

Before planting a groundcover it is critically important to control all perennial weeds in the planting bed. Perennial weeds that come back year after year, such as quack grass or Canada thistle, are very difficult to eliminate when they become established amid a groundcover. Weeds can be smothered effectively over the course of a growing season by covering them with heavy black plastic or thick layers of newspaper covered with mulch or compost. Using this method, planting can occur in the fall or following spring. Applying a broad-spectrum herbicide directly to perennial weeds is a much faster option, as planting can occur within a week or two of treatment.

A soil test is useful for determining nutrient levels as well as pH. Many groundcovers are quite adaptable when it comes to soil conditions, but they will still grow best if the pH is between 6.0 and 7.0. If necessary, adjust the soil pH before planting, or choose plants that can tolerate the current conditions.

The best time to plant groundcovers is in the spring or fall when temperatures are mild and precipitation is more frequent. Summer planting is possible, but frequent watering is a necessity during hot, dry weather. Plants should be set in the ground at the same level they were in the pot, or slightly higher to account for added mulch. Mulching bare soil between plants is helpful for keeping weeds under control, at least for a season or two until the groundcover becomes established and covers the soil. Mulch will also decrease erosion on slopes until the plant roots are extensive enough to do the job. Two to three inches of coarse organic mulch should be enough to prevent weed seeds from germinating and limit erosion.

Check the soil moisture of newly planted groundcovers at least once a week during the first growing season. When the soil begins to dry out, apply enough irrigation to wet the soil to the root zone of the plants (three to six inches). Overhead sprinklers or drip hoses will work equally well for this purpose, though drip irrigation is more water efficient. Proper spacing between plants depends on the plant species' growth rate, growth habit, how quickly you want to cover the area, and cost. Faster results naturally come from spacing groundcover plants closely, but depending on the size of the area, this may be too costly. Wider spacing is acceptable as long as weeds are managed regularly until the groundcover fills in. While they are fast growers, it will still take some time for them to entirely cover the soil. Most groundcovers are spaced between six inches and two feet apart.

## Maintenance

Once established, most groundcovers require relatively little maintenance. During periods of drought, some supplemental watering may be necessary to reduce stress on plants. Some groundcovers are more drought tolerant than others, though all will benefit from extra water. Water should be applied until it reaches the root zone of the plants.

In general, groundcovers have fairly low nutrient requirements, and fertilizer may not be necessary for healthy, vigorous growth. If fertilizer is necessary, based on a soil test, choose a slow-release formulation that contains at least 30 to 50 percent slow-release or “water insoluble nitrogen”. These fertilizers will provide a consistent supply of nitrogen to plants throughout the growing season. Compost and manure are other good sources of nutrients that can be applied as a topdressing to build soil organic matter. Fertilizing will have the greatest impact if performed in the early spring shortly before growth starts.

Some groundcovers may require some pruning or deadheading to maintain a tidy appearance, such as cat-mint (*Nepeta racemosa*) or black-eyed Susan (*Rudbeckia* species). In most cases, plantings can be maintained fairly easily with hand pruners or hedge shears. Groundcovers planted near trees or shrubs may require some raking or leaf blowing in the fall to remove excess debris. Too many fallen leaves can smother groundcovers or promote disease issues by trapping too much moisture around the foliage.

Common Name Botanical Name	Light	Growing Conditions	Description
<b>Allegheny spurge</b> ( <i>Pachysandra procumbens</i> )	Part to full shade	Moist, organic, well-drained soil. Spreads slowly. Zone 5	Shrubby ground cover that grows 8-12” tall and spreads by rhizomes. Native to Eastern North America.
<b>Barren strawberry*</b> ( <i>Waldsteinia fragarioides</i> )	Full sun to part shade	Average, well-drained, slightly acidic soil; tolerates a wide range of soil types. Zone 4	Strawberry-like plant that forms 6” tall mats of foliage, spreading by rhizomes. Five-petaled yellow flowers bloom in spring.
<b>Barrenwort</b> ( <i>Epimedium species</i> )	Shade to part shade	Dry to medium soil; tolerates drought and growing around tree roots. Zone 5	Rhizomatous, clump-forming perennial. Grows 6-9” tall. Delicate spring flowers can be white, red, pink, purple, or yellow.
<b>Bearberry*</b> ( <i>Arctostaphylos uva-ursi</i> )	Full sun	Acidic, well-drained, dry to medium, sandy soils. Does not need fertilizer. Zone 2	Woody, evergreen, spreading shrub that reaches 6-12” tall. Drooping white/pink flowers in spring followed by red berries.



<b>Black-eyed Susan</b> ( <i>Rudbeckia</i> species)	Full sun	Dry to moist soil. Prefers consistent moisture but can tolerate drought. Zone 3	Upright, rhizomatous, clumping perennial. Up to 3' tall. Flowers with yellow petals and brown center disk. Deer resistant.
<b>Bush honeysuckle*</b> ( <i>Diervilla lonicera</i> )	Full sun to part shade	Dry to moist, well-drained soil. Drought tolerant. Zone 3	Suckering, deciduous shrub; 3' tall by 4' wide. Clustered tube-like, yellow-orange flowers in spring. Attracts pollinators.
<b>Canada anemone*</b> ( <i>Anemone canadensis</i> )	Full sun to part shade	Medium to wet soil, well-drained soil; tolerates clay. Zone 3	Aggressive herbaceous perennial that grows up to 2' tall. Deeply divided leaves and showy white flowers. Deer resistant.
<b>Catmint</b> ( <i>Nepeta racemosa</i> 'Walker's Low')	Full sun to part shade	Dry, well-drained soil; very drought tolerant. Zone 4	Low, clump-forming perennial; around 24" tall. Whorls of purple two-lipped flowers and aromatic foliage. Deer resistant.
<b>Common bugle</b> ( <i>Ajuga reptans</i> )	Full sun to part shade	Average to moist soil. Zone 3	Mat-forming perennial with shiny leaves in various colors. Rarely exceeds 6-8" tall. Whorls of blue flowers in spring.
<b>Cranesbill</b> ( <i>Geranium macrorrhizum</i> )	Full sun to part shade	Dry to medium soil; drought tolerant. Zone 4	Rhizomatous perennial, 12-16" tall. Drought tolerant. Deeply divided, aromatic leaves. Purple-pink flowers.
<b>Creeping juniper*</b> ( <i>Juniperus horizontalis</i> )	Full sun	Dry to medium, sandy soil; drought tolerant. Zone 3	Prostrate evergreen shrub; 6-18" tall. Prefers rocky or sandy soils. Spreads with trailing branches. Blue-green foliage.
<b>Creeping phlox</b> ( <i>Phlox stolonifera</i> )	Full sun to part shade	Organic, moist, well-drained soil. Prefers acidic, rich soils. Zone 5	Mat-forming perennial with that spreads by stolons. 6-12" tall. Tubular purple flowers bloom in spring.

<b>Daylily</b> ( <i>Heemerocallis</i> )	Full sun to part shade	Average well drained soil. Tolerates a wide range of soil types. Zone 3	Clump forming perennial with blade-like leaves. Flower stalks can reach 1-6' tall depending on variety. Flowers can be red, orange, yellow, white, pink, or purple.
<b>Dwarf crested Iris</b> ( <i>Iris cristata</i> )	Full sun to part shade	Medium to moist soil; drought tolerant. Zone 3	Low-growing perennial that spreads rapidly by rhizomes. 6-18" tall. Pale purple flowers appear in spring.
<b>European wild ginger</b> ( <i>Asarum europaeum</i> )	Shade to part shade	Moist, well-drained soil. Zone 4	Creeping perennial with dark green, kidney-shaped leaves. 4-6" tall. Self-seeds. Flowers at ground level. Deer resistant.
<b>Foam flower*</b> ( <i>Tiarella cordifolia</i> )	Shade to part shade	Medium, well-drained soil; thrives in rich, consistently moist soil. Zone 4	Clump-forming perennial that spreads by rhizomes. Heart-shaped leaves with 3-5 lobes rise from the ground. Small, clustered white flowers in spring.
<b>Fragrant sumac*</b> ( <i>Rhus aromatica</i> 'Gro-low')	Full sun to part shade	Average to dry, well-drained soil; does not tolerate poor drainage. Zone 3	Low-growing, densely branched shrub. Spreads by suckers. Grows 2-4' tall. Three-parted leaves have good fall color.
<b>Golden knee</b> ( <i>Chrysogonum virginianum</i> )	Shade to part Shade	Moist, acidic, well-drained soils.	Mat-forming perennial that rapidly spreads by rhizomes. Foliage reaches 3-4" tall. Yellow flowers in spring.
<b>Japanese pachysandra</b> ( <i>Pachysandra terminalis</i> )	Shade to part shade	Medium moisture, well-drained soil. Tolerates drought and clay soil. Zone 5	Evergreen, upright perennial that spreads by rhizome. Leaves whorl around stems. Small white flower stalks in spring. 8-12" tall.

<b>Lamb's ear</b> ( <i>Stachys byzantina</i> )	Full sun	Dry to medium, well-drained soil. Zone 4	Perennial that spreads with creeping stems. Bluish, wooly leaves. Flower stalks not especially showy.
<b>Lowbush blueberry*</b> ( <i>Vaccinium angustifolium</i> )	Full sun to part shade	Moist, organic, well-drained, acidic soil. Sandy soil with consistent moisture acceptable. Zone 2	Deciduous twiggy shrub. Spreads by seed and suckers. 6-24" tall. Red fall color. White, drooping urn-shaped flowers in spring. Edible berries. Attracts wildlife.
<b>Lungwort</b> ( <i>Pulmonaria</i> species)	Shade to part shade	Moist, well-drained, organically rich soils. Zone 3	Creeping perennial that grows 6-12" tall. Dark green foliage with silvery blotches. Funnel-shaped pink and blue flowers. Plant powdery mildew resistant cultivars.
<b>Moss phlox</b> ( <i>Phlox subulata</i> )	Full sun	Medium moisture, well-drained soil. Grows well in sandy, dry areas. Zone 3	Vigorous, mat-forming perennial. Needle-like evergreen foliage. 4-6" tall. Fuchsia, pink, violet, or white flowers in spring.
<b>Pennsylvania sedge*</b> ( <i>Carex pensylvanica</i> )	Shade to part shade	Dry to medium, well-drained soil. Zone 3	Sedge that thrives in dry woodland areas. Clumps grow 6-12" tall. Grass-like foliage. Tolerant of heavy shade.
<b>Russian arborvitae</b> ( <i>Microbiota decussata</i> )	Full sun to part shade	Moist, well-drained soil. Zone 3	Evergreen shrub that grows 6-18" tall. Scale-like foliage held in fan-like sprays. Similar to creeping juniper.
<b>Slender deutzia</b> ( <i>Deutzia gracilis</i> 'Nikko')	Full sun to part shade	Average, moist, well-drained soil. Tolerates clay soil. Zone 5	Dense, deciduous shrub that grows 2-4' tall. Small bell-shaped white flowers in spring.

<b>Stonecrop</b> <i>(Sedum rupestre 'Angelina')</i>	Full sun	Dry, well-drained soil. Heat and drought tolerant. Zone 5	Mat-forming perennial that spreads quickly. 4-6" tall. Yellow, cylindrical, pointy, succulent leaves. Yellow flowers in summer.
<b>Sweet fern*</b> <i>(Comptonia peregrina)</i>	Full sun to part shade	Medium to dry, well-drained soil. Drought tolerant. Zone 2	Deciduous shrub that grows 2-5' tall. Fragrant, fernlike leaves on upright stems. Fixes its own nitrogen.
<b>Thyme</b> <i>(Thymus serpyllum)</i>	Full sun	Dry or medium moisture, well-drained soil. Drought tolerant. Zone 4	Creeping perennial that grows up to 4" tall. Thin stems covered with tiny, fragrant leaves. Purple-pink flowers in summer.

\*Indicates plants native to New Hampshire

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