

Ground covers are low-growing plants, usually less than 12 inches tall, that spread to form dense mats which bind and hold the soil in place. Many also have a season of effective bloom.

Turfgrass is the most common ground cover. However, sites that are less suitable for turfgrass, such as slopes, steep banks, and shaded areas, can often grow other ground covers successfully.

A well-established ground cover generally requires less maintenance than the typical turfgrass lawn. Ground covers are not totally maintenance-free, nor will they always tolerate conditions that will not support a turf.

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 section 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

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.

Selecting a Ground Cover

When deciding which ground cover to plant, consider the plant's height, spread, blooming period, seasonal foliage color, texture, drought tolerance, and whether it is deciduous or evergreen. The planting site also will affect your choice because each ground cover has specific requirements. See Neb Guide G84-698, selecting a Ground Cover, for a list and description of the cultivars that can be grown in Nebraska.

Preparing the Soil

A soil test* will indicate the site's fertility and pH. Most ground covers prefer a slightly acid to neutral soil (between pH 6.0 and 7.0).

If the soil is low in nitrogen, incorporate enough 1:2:0 or 1:2:1 fertilizer to apply 1 1/2 to 2 pounds of actual nitrogen per 1,000 square feet, or about 30 to 40 pounds of 5-10-5 per 1,000 square feet. Applying highly available phosphorus as a starter fertilizer is beneficial for root initiation and plant establishment.

Many ground covers develop crown rot in heavy clay soils that don't drain well. Adding coarse organic matter, such as composted or aged manure, peat moss, or compost can improve the drainage of heavy clay soils and increase the water-holding capacity of light sandy soils. Roto-till or spade the soil to an 8-inch depth and thoroughly incorporate the organic matter at a rate of two to three bushels per 100 square feet.

Soil preparation can cause serious erosion on steep slopes. Working the soil across the slopes in 12- to 24-inch wide bands alternated with undisturbed soil will help reduce erosion. Mulching the slope with a fiber mat will further reduce erosion while conserving moisture and reducing weed competition.

Planting

Ground covers should be planted in the spring or fall. Containerized stock can be planted anytime during the growing season if proper planting and maintenance procedures are followed.

The number of plants needed depends on the spacing of the individual plants their rate of growth and how fast you want the space to fill in. You may want to densely plant a small, highly visible area for rapid fill, but a large area may require sparser planting, with several years being allowed for covering the site.

To estimate the number of plants needed, first determine the size of the site in square feet. Considering the average width of the species and the spacing of individual plants, use Table I to calculate the approximate number of plants you will need.

Planting space required per number of plants.

Space between plants in inches using 50 plants.

4" between plants 7 sq. ft.

6" between plants 16 sq. ft.

8" between plants 28 sq. ft.

12" between plants 64 sq. ft.

When planting rooted cuttings, don't allow them to dry out. Plant them at the proper depth and firm the soil around the roots to ensure good soil-root contact. Watering small sections as you plant will prevent the roots from drying out.

Ground covers can be planted in either straight or staggered rows. Staggered rows help reduce erosion on slopes by retarding run-off.

Watering

Water new plantings thoroughly and regularly until the roots become established. Once established, water as needed for the ground cover you've selected--each type has different requirements--but apply at least 1 inch of water at each watering to moisten the entire root zone. Applying less water results in a shallow root system which makes the planting more susceptible to drought injury.

Controlling Weeds

Control weeds to enable the newly planted ground cover to form a dense mat. When properly established, ground covers can successfully compete with weeds. Hand weeding is effective, but can be time consuming. Mulching is a practical way to reduce weeds. Nonaggressive annual flowers can be used to fill in spaces in a new planting. They help shade out weeds but do not inhibit the spreading growth of the ground cover. Be sure to provide enough moisture for both plant types so competition is not a problem.

Preemergent herbicides can be used to control weeds in large plantings. Dacthal, Treflan, and Dymid can be used on most ground covers, but always check the label for specific information on the particular plant. If perennial weeds, such as bindweed or annual grasses, are a problem, consider fumigating the site with Vapam after preparing the soil. Wait at least two weeks before planting and cultivate the soil again to be sure the chemical has dissipated.

Pruning

Pruning will stimulate new growth on most ground covers by causing buds to break from the base or along the plant's stem. At planting time, prune back the growth by one half (more on trailing plants such as ivy or periwinkle) to promote branching.

Annual pruning will control ground covers and keep them attractive. Generally, the best time to prune is just after new growth has begun in the spring. A mower set very high, nylon cord trimmer, or hand clippers can be used. Rejuvenation and size control are important for plants such as wintercreeper, St. John's-wort and carpet bugle. Cutting back after flowering can induce repeat flowering in sun rose, alyssum and cottage pinks. Pruning also can help control diseases by removing infected foliage.

Mulching

Mulching serves many purposes in a ground cover planting. Two to four inches of mulch around the plants helps control weeds, maintains a more constant soil temperature, conserves soil moisture and reduces erosion on slopes. Compost, leaf mold, well-rotted manure, bark or wood chips, peat moss, and sawdust can be used as mulches. However, mulches that have not completely decomposed, such as fresh sawdust, will temporarily draw nitrogen from the soil. An application of additional nitrogen (1 1/2 to 2 pounds of ammonium sulfate per 1,000 square feet) will make up for this excess use.

Mulching helps to protect plants from winter injury resulting from uneven soil temperatures and soil heaving. Most evergreen ground covers need protection from winter desiccation (drying). Apply mulch loosely after the ground has frozen and remove it in the spring before growth begins. Weed-free straw, peat moss and pine tree boughs can be used for winter mulch.

Insects and Diseases

The insect and disease problems of other landscape plants are also found on ground covers. Always identify the problem before using controls, and read and follow the label directions carefully.