

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Historical Materials from University of
Nebraska-Lincoln Extension

Extension

1984

G84-697 Ground Covers: Their Establishment and Maintenance (Revised June 1992)

Don Steinegger

University of Nebraska--Lincoln, dsteinegger1@unl.edu

Luann Finke

University of Nebraska--Lincoln

Follow this and additional works at: <https://digitalcommons.unl.edu/extensionhist>



Part of the [Agriculture Commons](#), and the [Curriculum and Instruction Commons](#)

Steinegger, Don and Finke, Luann, "G84-697 Ground Covers: Their Establishment and Maintenance (Revised June 1992)" (1984). *Historical Materials from University of Nebraska-Lincoln Extension*. 1053. <https://digitalcommons.unl.edu/extensionhist/1053>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



Ground Covers: Their Establishment and Maintenance

This NebGuide describes how to plant and maintain ground covers to take advantage of their low-maintenance features.

*Donald H. Steinegger, Extension Horticulturist
Luann Finke, Former Extension Horticulture Assistant*

- [Selecting a Ground Cover](#)
- [Preparing the Soil](#)
- [Planting](#)
- [Watering](#)
- [Controlling Weeds](#)
- [Pruning](#)
- [Mulching](#)
- [Insects and Diseases](#)

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.

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 NebGuide 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 more sparse 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.

<i>Space between plants</i> (inches)	<i>64 plants will cover</i> (sq. ft.)	<i>100 plants will cover</i> (sq. ft.)
4	7	11
6	16	25
8	28	44
10	45	70
12	64	100
15	100	156
18	144	225
24	256	400

Ground covers can be purchased as rooted cuttings, potted plants, plant clumps, or balled and burlapped. The form of the plants will influence plant spacing and planting season. For example, rooted cuttings, the most common form, are usually planted closer than containerized plants.

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, alysium 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.

*Contact the Cooperative Extension Office in your county for information on how to obtain a soil test.

File G697 under: HORTICULTURE

E-7, Miscellaneous

Revised June 1992; 7,000 printed.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Elbert C. Dickey, Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.

University of Nebraska Cooperative Extension educational programs abide with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.