



HOW-TO BOOKLET #3137 GROUND COVERS



TOOL & MATERIAL CHECKLIST

- Spade
- Seeds
- Fluorescent Light
- Household Spray Bottle
- Garden Fork
- Small Containers
- Fertilizer
- Tine Rake
- Potting Soil
- Garden Hose

Read This Entire How-To Booklet For Specific Tools and Materials Not Noted in The Basics Listed Above

Ground covers are finding a place in more and more home landscapes. Where lawn grasses struggle to survive—in heavy shade, on steep slopes, or in dry climates—homeowners can turn to a variety of other plants that will thrive. Because they often need less water, fewer nutrients, and minimal care, these alternative ground covers can save you time and money. They can also enhance the looks of your property, providing a handsome backdrop to the house, patio, deck, or other plantings, as well as attractive colors and textures of their own.

In this How-To Booklet, we'll introduce these useful plants, suggest ways for you to use them on your property, and explain how to plant and care for them. Finally, we'll recommend a number of popular ground covers to get you started.

WHAT ARE GROUND COVERS?

A wide range of plants, including annuals, perennials, vines, and shrubs, produce stems, branches, and foliage in sufficient density to cover the ground and prevent other plants from growing beneath them. Coverage can involve large numbers of small plants; many of these ground covers multiply rapidly. Others, including some vines and low-spreading shrubs, cover ground with fewer plants but more abundant foliage.

Ground covers are valued primarily for their foliage—thin as a blade of grass or broad as a dinner plate; less than an inch in height to several feet tall; colored in every green imaginable as well as silvers, grays, bronzes, yellows, and more. But many ground covers offer lovely flowers as well,



from the blizzard of tiny white blossoms that cover snow-in-summer, to the elegant flowers of the daylily. Some ground covers are evergreen and supply a welcome dose of color in the winter landscape. Those that drop their leaves or die back to the ground in the fall (called deciduous plants) continue to please the eye with attractive bark or branching patterns or by providing shelter for overwintering birds or other wildlife.

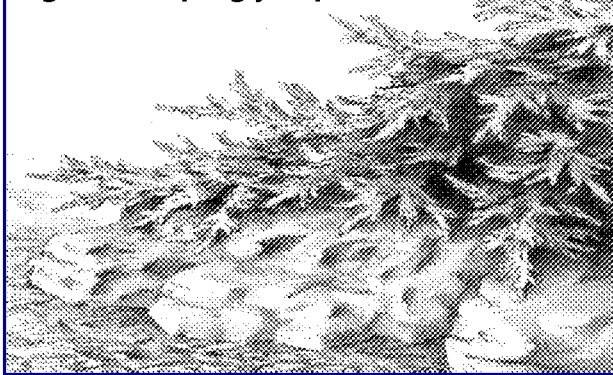
USING GROUND COVERS

Shade. Most lawn grasses suffer in dense shade, where their difficulties are frequently compounded by competition from tree roots for water and nutrients. Shady garden beds or woodland gardens are also inhospitable to many favorite flowering plants. In these situations, shade-loving ground covers provide attractive substitutes.

Common shade-loving evergreen ground covers include vinca and pachysandra. For a grassy look, try lily turf, which tolerates root competition. Taller deciduous plants include a wide range of hostas and ferns; astilbes provide strikingly colorful flower and seed heads in summer and fall.

Others: • English ivy • Lily-of-the-valley • Vinca • Goutweed • Creeping Jennie • Wild ginger • Ajuga • Winter creeper • Sweet woodruff

Fig. 1: Creeping juniper



Slopes. Consider ground covers for slopes steeper than 20°. There, they check erosion by creating a network of soil-retaining roots beneath the ground and by protecting bare soil from driving rain and wind above ground. Slopes often pose growing conditions difficult to remedy—poor soil, hot sun, drying winds—so take care to choose plants adapted to your site.

Valued ground covers for slopes include ivies, winter creeper, pachysandra, and Asian jasmine, all of which are evergreen. Junipers and cotoneaster are useful shrubs, as are several native varieties of kinnikinnick (also called manzanita). Various ice plants, which flower in blazing colors, are widely used in California and mild-winter areas of the Southwest.

Others: • Goutweed • Verbena • Vinca • Honeysuckle • Heather • Running bamboo • Rosemary • Daylily • Mahonia • Baccharis • Crown vetch • Aaron's-beard

Dry conditions. Recent water shortages in many parts of the country have made homeowners conscious of the amount of water required to maintain residential plantings, particularly the lawn. Drought-tolerant ground covers can help reduce water use, while adding variety to your landscape. Plants tolerant of dry conditions are particularly valuable for slopes, which are likely to be drier than nearby areas and more difficult to water artificially.

Good plants for dry sites include three-leaf sumac, kinnikinnick, cotoneaster, and junipers. Verbena, lantana, and African daisies provide colorful flowers, as do many of the low-growing sedums, whose fleshy leaves are distinctive after the flowers have gone.

Others: • Baccharis • Ceanothus • Blue fescue • Winter creeper • Blue fescue • Silver spreader • Vinca • Cinquefoil • Evergreen candytuft

Under traffic. Few ground covers are as durable as lawn grass, but some can stand up to occasional or light foot traffic. Plant them as outdoor “throw rugs,” or insert them between flagstones, bricks, or other pavers in paths and patios.

Thyme forms a low woody mat covered with tiny, fragrant leaves. The strawberry-like foliage of cinquefoil is perhaps a bit more durable and is covered with numerous yellow flowers in spring and summer. Try Irish moss between the flagstones of a path or patio. In warm-winter climates, blue star creeper or baby's-tears suits the same purpose.

Others: • Wild strawberry • Chamomile • Sweet alyssum • Bird's-foot trefoil • Common thrift • Moss pink • Sweet woodruff • Himalayan fleece flower

Eye pleasers. Ground covers solve landscape problems posed by shade, slopes, and so on, but you can use them just to please the senses, too. Planted in broad swathes, in free-form islands, or edging a walkway or drive, ground covers add color and texture to the scene. A massed planting of low shrubs such as prostrate juniper or tall ornamental grasses creates an attractive undulating contrast to a nearby lawn. Large patches of hostas or ferns provide a transition to a woodland garden. A meadowlike planting of grasses and wildflowers can brighten even a small backyard.

Others: • Creeping zinnia • Dusty-miller • Sundrops • Nasturtium • Astilbe • Heather • Evening primrose • Bergenia • Gazania • Daylily • Geranium • Violet

Fig. 2: Hosta



PREPARING THE SITE

The preparation necessary to grow healthy ground covers has a lot to do with the plants you choose. Plants adapted to your area's soil, temperatures, and rainfall require less preparation and less long-term care. The plants mentioned above are widely used, but it's wise to ask knowledgeable staff at a nursery about plants well suited for local conditions.

Where many small plants are needed, prepare the site as you would for a new lawn or garden bed. Dig the soil to a spade's depth (6–8 inches), working in several inches of compost, rotted manure, or peat moss to improve tilth and long-term fertility. Rake out or break up large clods. If you're unsure of the soil's fertility, add 1-1/2 to 2 lb. of 10-10-10 fertilizer per 100 sq. ft. (Your local Cooperative Extension agent can tell you about soil testing for more precise judgment of soil fertility.)

It can be more efficient to prepare individual planting holes for large ground-cover plants. Make the hole slightly larger than the plant's root ball (the soil and roots in the container). If you're planting into native soil or around a new house, you may wish to work manure or other amendments into the bottom of the hole and the surrounding soil.

Weeds are the major enemy of ground covers. You can remove most large weeds (and sod) as you dig, but disturbing the soil will activate dormant seeds. If possible, wait several weeks and remove newly germinated weed seedlings. Another method is to apply a nonspecific herbicide, which will kill all plants it touches. If you want to avoid toxic chemicals, you can smother weeds and turf by spreading a layer of black plastic over the site for several weeks in the heat of summer.

STARTING FROM SEEDS

A variety of ground covers can be purchased as plants from a nursery or garden center, but where many plants are required, it can be much less expensive to start them from seeds. Annuals are frequently grown from seeds; many perennials,

however, must be purchased as plants, because seed-grown plants may not reproduce the desired characteristics. Seeds are also impractical for growing most shrubs.

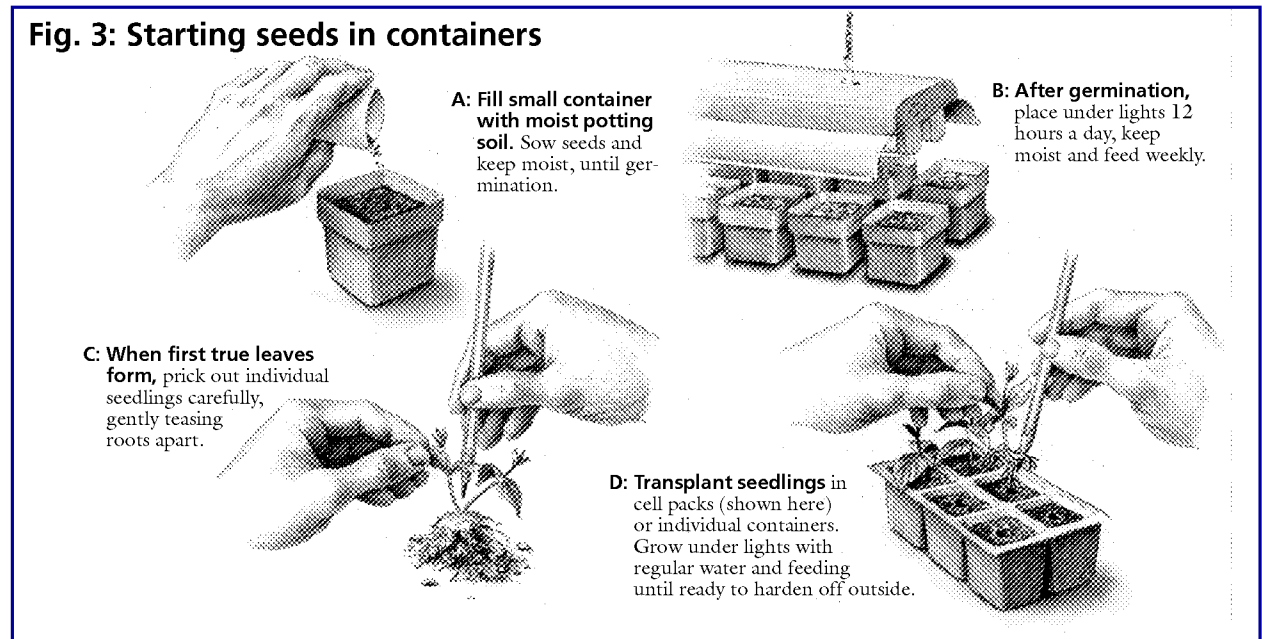
Direct seeding. Numerous annual and some perennial ground covers can be sown outdoors where they are to grow (some plants do best when direct sown). This method is useful where many small plants are required to cover an area. Seed packets are dependable sources of basic information on planting—when, how deep, how long until germination.

Sow the seeds evenly onto previously prepared soil, water them thoroughly, and keep them moist until germination. A layer of straw or a covering of light horticultural fabric can help conserve moisture. When the plants are large enough to work with, thin to the recommended spacing and continue to water regularly (do so even for drought-tolerant plants) until growth is well established. For perennials, this extra attention may be needed throughout the first season.

Starting seeds in containers. Direct seeding can be risky. A sudden cold spell, a torrential rain, or hot drying winds can reduce germination or wipe out little plants. Starting seeds in containers and growing them under controlled conditions into robust seedlings avoids these problems. The method shown in **Fig. 3** works well. All of the necessary materials can be purchased at a nursery or garden center.

Sow seeds in 4-inch plastic containers filled nearly to the top with moist potting soil. Wet the sown seeds with a household spray bottle and set the pot in a warm part of the house out of direct sunlight. Keep seeds moist by spraying or by enclosing the containers in plastic bags. When the seeds have germinated, place the containers under lights for at least 12 hours a day. Whenever the potting soil dries, set the containers in a shallow tray filled with water so the soil absorbs water from the bottom, which encourages deep rooting. (Remember to remove the containers and allow them to drain.)

Fig. 3: Starting seeds in containers



Feed the plants once a week with a soluble fertilizer diluted to one half or one quarter the ordinary rate. Raise the lights as the plants grow to keep the tubes about 2 inches above the top leaves.

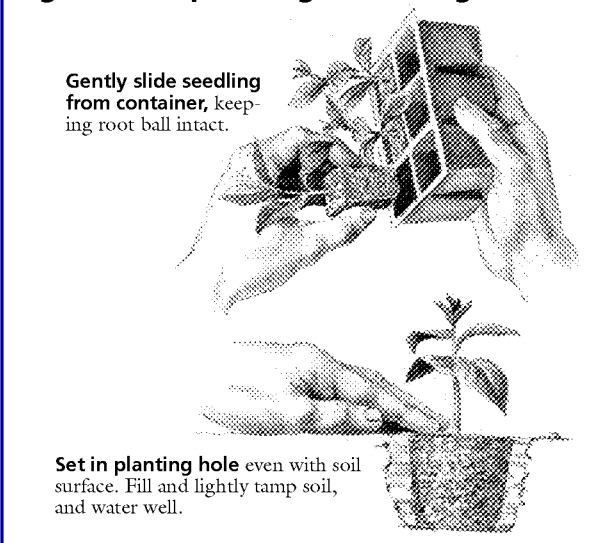
After the plants have developed their first true leaves, transplant the seedlings to individual containers. Four- or six-cell plastic packs work well for small plants; use 3-inches or 4-inches pots for plants that quickly grow large. Fill the cells or pots with fresh, moistened potting soil. Holding a seedling gently by a leaf, prick it out of its pot with a sharpened pencil, taking care to disturb its roots and attached soil as little as possible. Poke a hole in the soil of the new cell or container, insert the seedling, and fill around it to bury the roots. Larger seedlings can be suspended in an empty cell while you add potting soil around the roots. Place the cell packs or individual containers under lights again, watering and feeding as before.

When the seedlings are large enough to put in the garden (after the last frost for tender plants), they need to be acclimated to conditions outdoors. Begin with a few hours in a spot protected from direct sunlight and wind, increasing to full exposure over several days.

TRANSPLANTING OUTDOORS

The procedure for setting container-grown plants in the garden is the same for plants you've grown

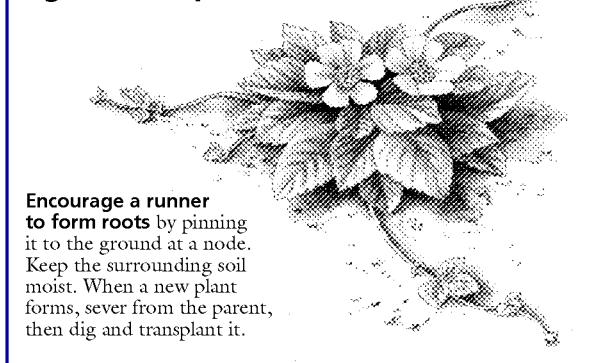
Fig. 5: Transplanting into the garden



from seeds or for those you purchase. Space the plants according to their mature size. Closely spaced plants will fill in more quickly, but they can become ungainly or unhealthy. A mulch of compost, bark chips, or grass clippings can keep weeds down and conserve moisture while young plants are too small to cover the spaces between. (Spread mulch first, then plant through it.) If you're planting large, slow-growing ground covers, consider planting annuals between them for several seasons.

Before transplanting, water the container and let it drain until the soil is moist but not soggy. Try to disturb the root ball as little as possible as you slide it from the cell or pot. Gently loosen congested roots on the bottom and lower sides of the root ball; unwrap any that encircle the ball. Place the plant into the prepared bed or planting hole so that the top of the root ball is at soil level. Fill the hole about halfway with soil, then soak the root ball with water, let it drain, and then add the remaining soil, firming it gently around the stem. Water is crucial for new plants; if nature doesn't oblige, provide 1 inch per week for the growing

Fig. 6: New plants from runners



season—even for drought-tolerant plants. Ground covers that are adapted to the conditions of your region and site should, once they're established, require minimal care.

To avoid losing young plants to wind or rain erosion on sloping sites, you can construct small "terraces." For mild slopes, a mound of earth on the downhill side may suffice to hold the plant in place until its roots take hold. On steeper sites, you might construct a barrier by pushing a wooden shingle into the ground below the plant, or pile a few rocks or bricks in place. Heavy mulch is invaluable for breaking the force of driving rain or wind.

INCREASING YOUR SUPPLY

Once you've gotten a ground cover started, either through purchasing plants or by growing them from seeds, it will often provide new plants to expand the patch or to start a new one. As mentioned earlier, some ground covers reproduce when above- or below-ground stems put down roots and send up leaves. For aboveground stems (called runners or stolons), you can aid this process as shown in **Fig. 6** by pinning the stem to the ground at a node (a swelling on the stem where a leaf or branch can develop) and regularly moistening the surrounding soil. When the new plants offer some resistance to a gentle tug, sever the connection to the parent, dig them up, and transplant them.

Fig. 4: Sweet woodruff

