

# TREES, SHRUBS, VINES AND GROUNDCOVERS

General Planting Guidelines  
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## GENERAL PLANTING GUIDELINES

### TREES

#### Sources and Types of Plant Materials

Trees are usually available from local commercial nurseries or your local Soil and Water Conservation District. They are sold as container grown trees or as balled and burlapped trees. Container-grown trees can be planted at any time of the year that the ground is not frozen if sufficient water is provided. They should be purchased and planted when quite young (less than 2" diameter trunk) to avoid dealing with root-bound plants.

Balled and burlapped trees are usually larger; check to be sure that soil around roots is solid, indicating it was dug with the tree and not just packed around bare roots. The soil should be kept moist.

#### Planting Bare-Rooted Tree Seedlings

**Timing:** Trees to be planted as bare-rooted seedlings should be handled only while dormant in spring, or after leaf fall in autumn.

**Pruning:** Often, transplanted trees need pruning because feeder roots are accidentally removed when they were dug. Pruning is required to reestablish the balance between the roots and the tops. Use a sharp tool for pruning and make a clean sharp cut

**Site Preparation and Planting:** Dig generous sized planting holes with perpendicular sides. Set aside the good topsoil to be used around the roots. Loosen the soil at the bottom of the hole. Set trees and shrubs at the same level as they were growing at the nursery. Spread the roots out and work soil over and around them. Alternate the topsoil with alternate layers of peat or compost until the hole is nearly full, compacting the soil firmly with your foot around the roots. Fill the hole with water. Finally fill the hole with loose dirt, shaping a shallow basin to retain water.

**Fertilization:** Wait until the second year when feeder roots are established to fertilize bare root stock.

### MULCHING

The soil between trees and shrubs must be planted with cover vegetation or must be mulched. When establishing ground covers, it is not desirable **to plant** species that will compete strongly with the ground cover or will make maintenance difficult. A thick durable mulch such as shredded bark or wood chips is recommended to prevent erosion and reduce weed problems.

On slopes where erosion may be a problem, jute netting or excelsior blankets may be installed prior to planting, and plants tucked into the soil through slits in the netting. Such plants should be put in a staggered pattern to minimize erosion.

### **Planting Balled-and-Burlapped and Container-Grown Trees**

**Timing:** Planting can be done any time during the growing season provided adequate water is supplied.

**Site Preparation and Planting:** The planting hole should be dug deeper and wider than the root ball. The final level of the root ball's top should be level with the ground surface.

As the hole is dug, topsoil should be kept separate from subsoil. If possible, discard subsoil and replace with good topsoil. If topsoil is unavailable, improve subsoil by mixing in 1/3 by volume of peat moss or well-rotted manure.

Heavy or poorly drained soils are not good growth media for trees. When it is necessary to transplant trees into such soils, extra care should be taken. Properly installed drain tile will improve drainage.

**Setting the Tree:** Depth of planting must be close to the original depth. The tree may be set just a few inches higher than in its former location, especially if soil is poorly drained. DO NOT set the tree lower than before. Soil to be placed around the root ball should be moist but not wet.

Set the tree in the hole. Leave natural fiber burlap intact on the root ball. Remove plastic burlap without breaking the soil of the root ball. Fill the hole with soil half-way, and tamp firmly around the root ball. Add water to settle the soil and eliminate air pockets. When the water has drained off, fill the hole the remainder of the way and tamp as before.

Use extra soil to form a shallow basin around the tree, somewhat larger than the diameter of the root ball. This will be for holding water when the tree is irrigated.

*NOTE: Level the ground and eliminate these basins when winter sets in, as ice forming in the basin might injure the trunk*

Soil around the tree should be thoroughly watered after the tree is set in place and when the soil becomes dry. Mulching around the base of the tree is helpful in preventing roots from drying out.

**Supporting the Tree:** Support newly planted trees are needed for one year, to prevent excessive swaying. Stakes or guy wires may be used.

**Fertilization:** Organic, liquid or chemical fertilizers can be used. Fertilize trees in early spring, before leaves emerge.

### **MAINTENANCE of Tree Plantings**

Like all plants, trees require water and fertilizer to grow. Ideally, young trees should receive an inch of water each week for the first two years after planting. When rain does not supply this need, the tree should be watered deeply but not more often than once per week.

Transplanted trees should be fertilized one year or so after planting. There are many sophisticated ways to supply fertilizer to trees, but

simple methods are adequate. The best material for small trees is well-rotted stable manure, if it can be obtained. Add it as a 2-inch layer of mull around the tree annually. If chemical fertilizers are to be used, a formulation such as 10-8-6 or 10-6-4 is preferred. Use about 2 lb per inch of trunk diameter measured 4 feet from the ground. Thus, if the trunk diameter at 4 feet was 5 inches, 10 lb of fertilizer would be applied.

*NOTE: Evergreens--use 1/2 the recommended amount of chemical fertilizer or use only organic fertilizers such as cottonseed meal, bone meal, or manure.*

## **SHRUBS**

Much of what has been said about trees also applies to shrubs. A shrub is an erect woody plant less than 15 feet tall, usually with several trunks rising from a common base. Some have the appearance of small trees, and some lie close to the ground.

### **Planting**

Follow the general procedure for TREE PLANTING when planting shrubs.

### **MAINTENANCE of Shrubs**

Proper pruning, water, and application of fertilizer every three years or so will keep shrubs healthy. Maintain the mulch cover or turf cover surrounding the shrubs. A heavy layer of mulch reduces weeds and retains moisture.

## **VINES AND GROUND COVERS**

Low-growing plants that sprawl, trail, spread, or send out runners come in many leaf types, colors and growth habits. Some are suitable only as part of a maintained landscape, and some can stabilize large areas with little care.

Like shrubs and trees, ground covers are best planted in spring. Container-grown plants can be planted throughout the growing season if adequate water is provided.

### **Site Preparation**

Ground covers are plants that naturally grow very close together, causing severe competition for space, nutrients, and water. Soil for ground covers should be well prepared. A well-drained soil high in organic matter is best.

If the area to be planted is so large that adding amendments to the soil as a whole would be impractical, organic matter may be added only to each planting hole.

Lime and fertilize according to soil test, or add five pounds of 10-10-10 and ten pounds of ground agricultural limestone to every 1000 square feet. Incorporate into the top 4-6 inches of the soil. Add organic matter up to 1/3 the total soil volume, either over the whole area (a layer 2 inches deep mixed into the top 6 inches) or in each planting hole, if the area is large.

Plants such as ivy, pachysandra, and periwinkle should be planted one-foot on center; large plants such as juniper can be 3-feet on center.

### **MAINTENANCE of Vines**

Trim old growth as needed to improve the appearance of ground covers. Most covers need once-a-year trimming to promote growth. Maintain mulch cover with additions of mulch where needed. Fertilize as described above during every 3-4 years.