

NORTHERN

Gardener

CREATING & CARING FOR YOUR ENVIRONMENT

Planting Instructions for Trees & Shrubs

Digging

- The planting hole should be dug approximately twice as wide as the soil ball.
- Measure the height of the root ball and dig the hole one-two inches less deep. Do not dig deeper or the plant will be too deep once the disturbed soil settles. A tape measure or a simple length of twine or string can be used to measure the root ball before digging.
- When digging is complete, roughen up the sides of the hole. This will help the plant to root in more easily.

Planting the plant

- If the plant is in a container of any kind, remove it at the planting site and place the plant in the hole. Do not plant too deep! The top of the root ball should be one-two inches above ground level.

CARING FOR YOUR ENVIRONMENT

- ✓ Following planting instructions carefully to reduce stress on the plant and increase the survival rate.
- ✓ Purchase a complete balanced slow-release fertilizer to provide environmentally sound fertilization of trees and shrubs. This will also enhance transplant survival and growth.

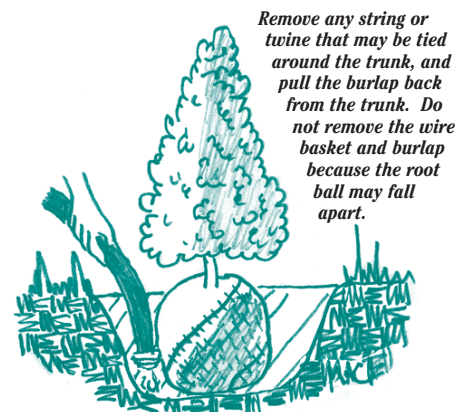
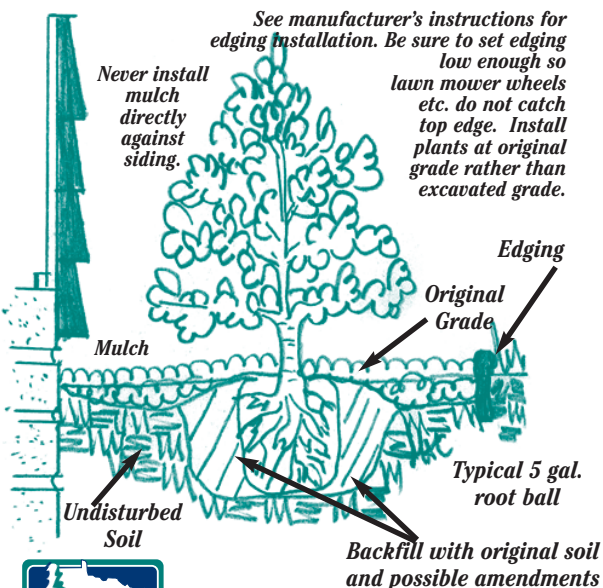
- Once it is in the hole, hold it erect and make sure it is centered and straight from all sides. Bare root plants should be placed with the largest branches facing the prevailing winds and with the roots straightened and spread evenly within the hole.
- Once your plant is properly placed, you can begin to backfill using the original soil dug from the hole. While poor soils may benefit from the addition of organic soil amendments such as peat moss or other composted products, you should never completely backfill with an amendment.

drainage. Instead, create a transition zone so that the change from the amended soil to the original soil is minor.

- A qualified nursery professional can advise you on whether or not amendments are appropriate for your conditions. Remember that too much amendment or an inappropriate amendment will only make soil problems worse.
- Plants may benefit from being fertilized at the time of planting. A slow-release, complete fertilizer that is high in phosphorus (the middle number) will aid in the development of a strong and healthy root system. Once again, the fertilizer should be mixed thoroughly with your original soil prior to backfilling. Never put

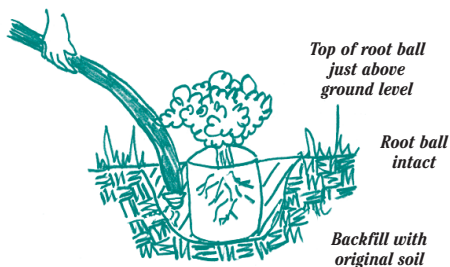
- If a soil amendment is called for, it should be mixed thoroughly with the original soil prior to backfilling the planting hole. In most cases, plants will grow best if the original soil is altered as little as possible. If roots suddenly encounter a completely different type of soil, they will have difficulty growing through this "wall" and into the surrounding soil. This has much the same effect as if you had not removed the container and will prevent proper root growth and

Planting Bed Cross Section



fertilizer directly on the roots of your plant and always use it in accordance with label directions.

- As you fill the hole, backfill evenly around the plant to keep air pockets to a minimum. If planting bare root, the plant can be lifted up and down slightly as you fill to help soil settle in around the roots.
- Once your planting hole is approximately 3/4 full of backfill, water the plant in thoroughly to further eliminate air pockets in the backfill. Then complete filling the hole and water in thoroughly once again.



CARE AFTER PLANTING

Irrigation and watering

- It is very important for your new plantings to be watered regularly. However, the type of soil and the weather conditions should determine how frequently and how much you water.
- Never water automatically without first checking the soil to determine if watering is needed. To do this, test the moisture of your soil about 4-8 inches deep. If you find it is dry or only slightly damp, the plant should be watered. Sandy soils generally will need to be watered

more frequently than clay soils, but always check before automatically watering the plant.

- Since roots grow where oxygen and water are most available, short and frequent waterings will result in the development of a shallow root system. Watering deeply, thoroughly and only as needed will encourage a deep and healthy root system that will be able to withstand environmental stresses.
- Heavy watering of lawns next to newly planted trees and shrubs can be detrimental to those trees and shrubs.

Mulching

- The use of mulch around your new plant will benefit it in many ways. A layer of several inches of a mulching material such as wood chips will help retain soil moisture and help to prevent wide fluctuations in soil temperatures throughout the year. It will also inhibit the growth of weeds in the area and by eliminating the grass close to the plant, it also reduces the risk of mechanical injury to the plant by weed whips and mowers.
- If you wish to use a weed barrier beneath the mulch, use a porous landscape fabric that allows for the passage of gases and liquids. Plastic does not allow for this movement and can result in the suffocation of the plant's root system. Also note: a weed barrier should not go over the planting hole.

Fertilization

- Once your plant becomes established, it may benefit from being fertilized every few years.

Spring is generally the time of year when plants have their greatest flush of growth and therefore their greatest need for nutrients. To ensure that nutrients are available when this growth begins, fertilizer can be applied in fall after the plant has dropped its leaves or in spring before the plant begins to break from dormancy.

- Unless the plant is suffering from a diagnosed nutrient deficiency, never apply nitrogen in late summer. This will promote new growth that will be particularly susceptible to winter damage and will cause the plant to not harden for winter as it normally would. The application of phosphorus and potassium, on the other hand, will help the plant to prepare for winter and can be applied in the fall to help the plant acclimate.
- Fertilizer comes in many forms and can be applied through root feedings or surface applications. Because fertilizer can draw moisture away from the plant, it is a good idea to water thoroughly both before and after the application when conditions are dry. A qualified nursery professional can assist you in selecting the product best suited to your needs and instruct you on how to use it properly.
- In problem situations, a soil test to determine your soil type, pH and nutrient levels is tremendously helpful. This can enable you to identify and treat a specific problem affecting the health of your plant rather than guessing at what it may be. Your county extension office can provide information and instruction regarding a reliable soil testing laboratory in your area.

IMPORTANT NOTE: In Minnesota, before digging, always contact Gopher State One-Call, who is responsible for designating where utility lines are located. Not only is this the law, but it's a safety measure that could prevent injury or death. Call **651-459-0002** or toll-free **800-252-1166**