PROPER PLANTING
&
MAINTENANCE METHODS
For Bare Root Seedlings

DANGER!
KNOW WHERE YOUR UTILITIES ARE BEFORE YOU DIG!
CALL DIGGERS HOTLINE AT (800) 242-8511
FOR FREE LOCATING SERVICE
(3 DAY NOTICE IS REQUIRED)
Regardless of the method of planting, it is imperative to keep the plant roots cool and damp at all times. Through this program, the roots have been treated with a special gel that absorbs and retains moisture. If plants are kept cool and moist and planted within a few days, no further treatment is necessary before planting. Monitor tree bags to make sure they stay moist inside. Add water if necessary.

Plants will be sorted, bundled and marked by species when you pick them up. Any additional sorting or separating should be done in a shady place protected from the wind to prevent root injury.

Plant at the same depth or up to one-half inch deeper than they grew in the nursery. The old soil line can be recognized by the paler colored bark on the stem and also a slight bump or swelling at this point.

The planting hole or slit should be deep enough to prevent curling or bunching up of the roots.

The soil must be firmly packed around the roots after planting. Special care should be taken to close the bottom of the hole as well as the top. If water is accessible, fill hole with water while back-filling the hole.
REMEMBER TO...

1. Keep the roots cool and moist.
2. Plant as soon as possible.
3. Pick a location that’s right for the plant.
4. Mulch as shown below around plant and water once per week.
5. Plant trees 7 – 12 ft. apart and shrubs 5-7 ft. apart. Plan layout beforehand! If possible, do not plant in straight rows. A much more natural appearance is accomplished with an irregular pattern.

Planting With A Shovel

1. Place shovel with concave side facing you; push straight into the ground.
2. With shovel in normal position and at 30 degrees to ground; push shovel in to intersect first cut.
3. Push down on handle 4 inches to break slice; pull out on shovel with soil in one piece.
4. Hold plant against straight side of slice; roots should not double up.
5. Slide slice back in place.
6. Pack thoroughly with heel.
Planting In A Furrow

Plow a furrow just deep enough to roll back the sod; generally 4 inches to 6 inches is deep enough. Use a shovel, spud or mattock and plan in bottom of furrow next to the furrow slice. If the land is sloping, plow on the contour.

Planting By Machine

Planting machines are usually limited to areas that can be worked with farm equipment. Some of the heavier machines pulled with a crawler tractor can plant in heavy brush or rough terrain.

These machines plant at the rate of 800 – 1,000 plants per hour, so it is practical to use them only on large plantings.

Since there are several types of planting machines, it is impractical to give machines planting procedures in this summary. Be sure the machine used opens an adequate planting slit and that it packs the plants in firmly. Before starting, get instructions on the use of the machine from the local forester or the owner of the machine. If planting is to be done on a custom basis be sure the operators are trained, experienced people.

Contact the DNR Forester at Pike Lake State Park (262) 670-3400 or the Land & Water Conservation Division (262) 335-4800 for a list of tree planting machines and services offered in the area.
Planting With A Spud
(See illustration on last page)

1. 
   ![Illustration](image1)
   Insert spud straight down and push forward to an angle of about 30 degrees.

2. 
   ![Illustration](image2)
   Lift spud slightly in the same plane.

3. 
   ![Illustration](image3)
   Push spud down at the same angle in order to obtain a new "bite".

4. 
   ![Illustration](image4)
   Pull spud toward you until it is straight up; this will give you a hole that is wide at the bottom.

5. 
   ![Illustration](image5)
   Set plant at correct depth and remove spud.

6. 
   ![Illustration](image6)
   Insert spud about two inches from hole.

7. 
   ![Illustration](image7)
   Pull handle back slightly to close bottom of hole.

8. 
   ![Illustration](image8)
   Push handle forward to close top of hole.

9. 
   ![Illustration](image9)
   Insert spud two inches from last hole.

10. 
    ![Illustration](image10)
    Push forward and then backward filling hole.

11. 
    ![Illustration](image11)
    Fill in last hole by stamping with heel.

**Note:** For best results hold plant to side of hole and allow dirt to flow by it when hole is being closed. Avoid wiggling spud back and forth as this will result in an hourglass shaped hole which is difficult to close. Pushing spud too far forward or pulling it too far back will loosen soil around hole and make setting of plant difficult.
Plant Maintenance

Once a plant has been successfully established it should be protected from grazing, fire, insects, disease and lack of moisture. Grazing is very detrimental to the plant. It is one of the simplest problems to solve. All that is necessary is a fence that will keep the livestock off of the root zone of the plant. The root zone is roughly equal to the distance from the main stem or trunk to the farthest reaching branches. (Example: a full-grown oak would be 40 ft. to 50 ft.).

Check periodically from mid-spring until fall for signs of insects or diseases attacking the plants. If any signs are apparent, samples of the damage or the fact that such a condition exists should be brought to the attention of the county forester or other professional.

On sites where the plants are in danger of becoming smothered with competing grass or brush, plans should be made at the time of planting to control them. You may wish to cultivate the entire area. If heavy brush comes in after planting you may have to keep it cut back until the plants are well established. Be careful not to damage the young tree bark.

Selective herbicides have been developed and may be used to control unwanted vegetation around the plants. After the plants have been planted for a year or two, a survival count should be made. If the survival falls below 65 to 70 percent, the blank spaces should be replanted.

Planting spuds may be rented from Equipment Rentals in West Bend (262) 338-6256