# PLANTING TREES AND SHRUBS WITH BARE ROOTS 

by Ray Rothenberger

Plants with soil around the roots, whether in containers or balled-and-burlapped, often get off to a quicker start than those with bare roots. Nevertheless, the lighter weight of bare-rooted plants make them easier to ship and less expensive to buy. With proper handling and planting, bare-rooted plants can grow well.

Promptness is important when planting barerooted trees and shrubs. This means planting early in the season as well as planting as soon as possible after they arrive from the garden center or in the mail.

Barerooted plants are normally kept in cold storage until they are brought out for sale. For best future growth it is important that these trees or shrubs are planted before leaves have developed.

Prompt planting while they are still dormant allows time for some feeder roots to develop before the leaves expand. Too few active roots in proportion to the leaves may result in leaf scorch (dying around the margins) or die-back of some twigs or limbs. Pruning back some of the top is a means of balancing roots and tops.

Since spring is often accompanied by frequent heavy rains, prompt planting may be difficult. Advance preparation of the planting holes during dry periods can be a big advantage. Soil that is to be placed in the hole around the roots should be piled up and covered with plastic to keep it dry enough for use when the plants arrive.

Before planting, it is helpful to soak the roots in water for 12 to 24 hours. Never exceed the 24hour soaking, however, or some damage may occur. If it is not possible to plant promptly after the soaking, cover the roots with damp sphagnum and wrap them in plastic. Keep the plants in a cool location but not below freezing. This may hold them a few extra days.

Because the root system of bare-rooted plants is limited, it is essential to keep the existing roots in the best possible condition. Therefore, protect the root system against drying at all times. Even though the plant is dormant, the root system can be damaged by exposing it to drying winds or bright sunlight. While preparing the place for planting, either keep the roots in a container of water, or keep them covered with moist burlap or some other moist material.

Plant trees and shrubs at the same depth they were previously growing. This spot can usually be determined by a fairly abrupt change in coloring near the base of the trunk. The planting hole should be wide enough so the roots can be well spread out. Place some topsoil in the base of the hole, then spread the roots over it. Continue filling with topsoil. If there is not enough topsoil to fill the entire hole, use the best soil around the roots and fill the upper part of the hole with the poorest soil. When the hole is about $2 / 3$ or $3 / 4$ full and all the roots are covered, tamp lightly and water thoroughly. After the water has filtered down and settled the soil, fill the remainder of the hole, but do not do any additional tamping.

Staking taller plants is beneficial after planting. It helps restrict movement during strong winds, which can often tear loose the delicate newly forming roots.

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