

Transplanting *TREES* Successfully

HGA-00335

Landscaped property is a definite asset to the homeowner in terms of monetary as well as aesthetic value. Using native trees is quite common in many areas of Alaska. Some trees may be left during initial construction and landscaping but too often they are badly damaged or removed to allow for construction. The property owner must then replace them with hardy exotics or with the same species of native trees.

Whether you are undertaking the initial landscaping of your property, adding to the number of trees already there, or moving a tree from one location to another, it is important to do it correctly. Even the hardiest native tree cannot overcome poor transplanting techniques.

Choosing a suitable tree for transplanting is the first step in this process. The tree should have the standard characteristics of the species and be in good health. A tree that is growing very close to others is often narrow and tall because it competes for light and space. Look for signs of physical damage and symptoms of insect or disease problems.

Choose a tree that can be removed successfully with the tools you have available. If you have a spade, a tree with a trunk diameter of 1 to 1½ inches is probably the largest you can move

without damaging the roots. The root systems of most native trees are relatively shallow-rooted and spread out horizontally due to cold underlying soil conditions. When you start digging, stay beyond the dripline of the tree. The small roots at the end are important for water and nutrient uptake; removing or damaging those important feeder roots puts additional stress on the tree after transplanting.

A tree that is in a dormant state is less likely to suffer transplant shock. The demands placed on the root system by a dormant tree are much less than by an actively growing one. Winter is a dormant period, but digging is usually not possible. Early spring is also a dormant period, but leaf growth often starts by the time the ground thaws enough to remove the tree. The fall dormancy period is usually preferable because it is followed by a period of time when a damaged root system can regrow and recover. This regrowth occurs even though the tree appears dormant and the soil is cold. If you have no choice but to move a tree during the growing season, be very careful not to cause root damage. Take precautions to prevent excessive water loss (transpiration) from the leaves during transport and after planting. Selective pruning as well as using windbreaks and antidesiccants are techniques to consider.

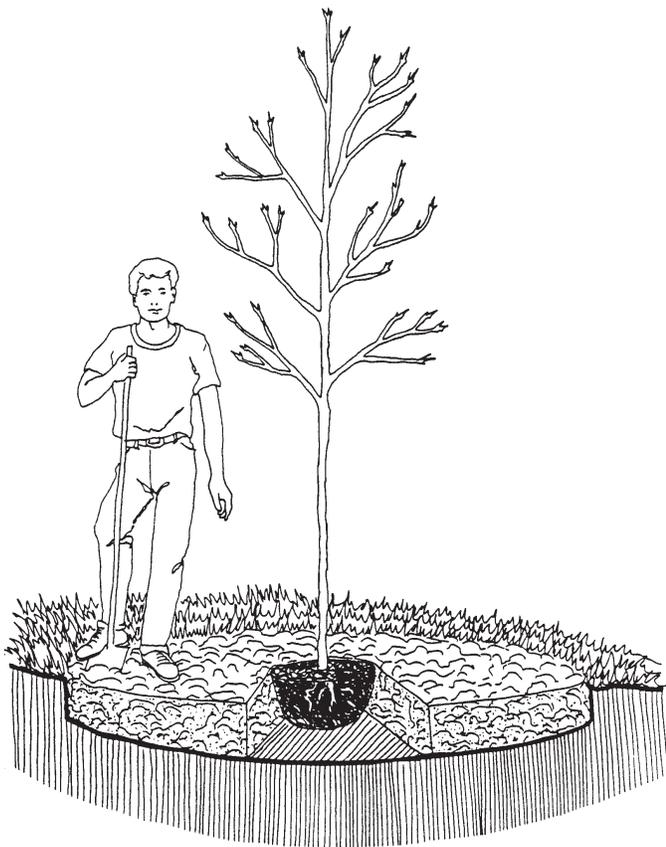
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Carefully remove the root ball by digging under the roots and toward the center from all sides. Carefully roll the root ball onto a tarp, burlap or heavy plastic. Tie securely to hold the root ball in place and prevent root drying.

Transport the tree to the new location so that drying effects are kept to a minimum. Hauling trees in the bed of a pickup for long distances can cause severe water loss from the foliage which could be followed by leaf drop after transplanting is done.

Choose and prepare the new planting site in advance. Consider the tree's requirements for sun, soil, water and air, drainage, wind protection and winter protection. The survival rate of transplanted trees is increased greatly if you can satisfy each plant's environmental needs.

The replanting hole should be five times the diameter of the root ball. This is especially important if the new site has a tight or poorly drained soil. The depth should be ten to twelve inches.



Excavate the center of the planting hole somewhat deeper so that the tree will be positioned at the same depth as it was originally growing. The soil used for replanting should be as similar as possible to the soil removed. This will ensure that drainage occurs through the soil and beyond and the plant will extend its roots from the transplanting hole into the surrounding area. Some organic matter can be added uniformly throughout. Place the tree in the hole, remove the wrapping from the root ball and carefully reposition any twisted or curled roots. Adding water to the soil several times during the filling procedure, settles the soil and eliminates any air pockets. Continue placing soil in the hole and rake it until it is even over the entire area. A shallow layer of surface mulch will help maintain moisture.

You should stake the tree only if strong wind is a problem. You can damage the bark or girdle the tree if the guy wires are too tight or left in place too long. Short sections of plastic water hose can be used over the wire to prevent damage where the wire contacts the tree.

Keep the tree well-watered during the transplant recovery period. If you were careful in selecting your tree and followed correct transplanting procedures, your tree will continue healthy growth in its new home.

The preparation of the planting area is critical to tree survival and vigorous growth. Rather than digging a hole, prepare a planting area five times the diameter of the root ball. Set the tree on undisturbed solid ground in the center of the area so that the upper surface of the root ball is level with the surrounding soil.