

Plant A Tree: An Alaska Guide to Tree Care



COOPERATIVE
EXTENSION SERVICE

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Select a good quality tree

The right tree will be an asset that increases in value as it ages, while a poor quality tree will require more maintenance and may become a liability.

Structure

- Trees with “cone” shaped crowns, such as spruce or larch should have a strong central leader. Trees with more “rounded” crowns, such as birch, willow, or crabapple should have strong branching. Don’t select trees with broken or multiple leaders.
- Branches are evenly spaced and form wide angles with trunk (45-90 degrees).
- Trunk stands upright without the support of stakes.



Good form – evenly spaced branches and angles between 40 and 90 degrees.



Poor form – no central leader and all branches arise from the same place on the trunk. Branches form narrow angles with trunk, increasing the likelihood of failure. Co-dominant leaders – those similar in size – will grow together, causing included bark, which is a likely failure point.

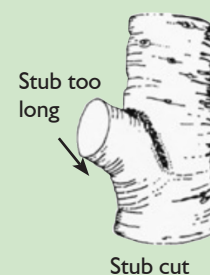
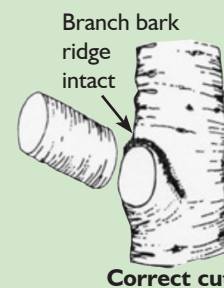
Roots

- Root flare (where trunk and roots meet) is at or above surface and there are several roots at least as big as a pencil in top 3 inches of soil.
- Roots are white or light brown and healthy.
- Roots fill container but are not pot-bound, circling trunk or inside of container.



Health

- Tree is free of wounds and incorrect pruning cuts – no stubs or flush cuts.
- Tree shows no signs of insects or disease; no weeds or other plants growing in the container.

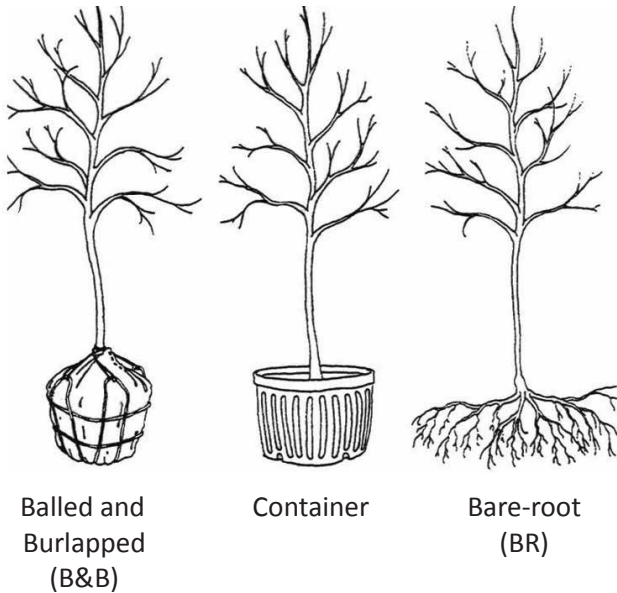


Incorrect cuts

Select a good quality tree

Bare Root (BR), Balled and Burlapped (B&B) or Container?

How do you want your tree? Each production method has advantages and disadvantages. Your situation will determine which will work best for you. Bare root trees are less expensive, easier to transport, handle and plant and may be planted anytime during the growing season as long as the roots are held in mulch, gravel or loose soil prior to planting so that they do not become dry. It is also easier to see what you are purchasing with BR tree and their long-term survival rate is usually higher. When selecting bare root stock keep these things in mind: the root system should be proportional to the branch system; branch diameter of ½ inch to ¾ inch is ideal. Roots should be firm, relatively straight and healthy looking.



Minimum root ball diameters for selected sizes of shade trees

Caliper (trunk diameter 4" above ground)	Minimum root spread	Tree height
1"	16"	8'-10'
2"	28"	12'-14'
3"	38"	14'-16'

(American Standard for Nursery Stock ANSIZ60.1)

Avoid:

- Undersized, yellow or missing leaves;
- Conifers that have been sheared into unnatural shapes (like Christmas trees);
- Roots that are broken, kinked or growing in a circular shape. Check containers and B&B trees for root flares that are below soil line and circling or pot-bound roots.
- V-shaped, or narrow angles between trunk and branches



Make sure the roots are not growing in a circular shape.



Avoid V-shaped angles between trunk and branches.

Plant it right

- Before you begin, be sure to have utilities located – they may be more shallow than expected. In Alaska, call 811 or 800-478-3121.
- Locate the root flare of your tree. You may need to remove excess soil to fully expose the root flare. Measure the distance from the root flare to the bottom of the root ball.
- Remove vegetation and dig in a saucer-shaped area at least two times the spread of the roots and no deeper than height from base of root flare to the bottom of the root ball; prepare a planting hole that encourages the roots to spread and grow into the surrounding soil.
- Remove all twine, tags and wrap from around the trunk and cut away and remove the container, wire basket and/or burlap; remove and properly dispose of any weeds from the pot to avoid introducing invasive plants.
- If planting BR, separate and spread the roots so that they will grow out into the surrounding soil; prune roots that are diseased, damaged or circling the root ball.
- For containerized or B&B trees, you may soak the root ball in a large tub of water to remove soil. This process, called root washing, allows you to find and cut circling or damaged roots and remove weeds and soil that may be different from soil on site. It will also be lighter and easier to plant.



Plant the tree in a wide and shallow hole.



Separate and spread the roots so that they will grow out into the surrounding soil.

- Prune roots with clean cuts back to white, healthy root tissue.
- Set the tree in the hole on solid ground so that it does not settle. Don't place loose soil in the bottom of the planting hole. The root flare must be just above ground level. Roots of trees planted too deeply may not get enough water and oxygen, and as the tree grows, the roots and trunk may decay, causing the tree to die or fail.
- If the soil is very poor or compacted, you may widen the planting hole to 4 – 5 times the size of the root ball and mix some topsoil with existing soil, creating a transition to surrounding soil. Roots growing in a hole filled with nonnative soil and surrounded by poor soil may circle the planting hole and become “pot-bound” rather than spreading out. Trees can grow successfully in rocky soil.

Plant it right

- Gently firm the soil around the bottom of the root ball so that the tree is vertical and adequately supported. Use water to settle the soil as you backfill in 1/3 increments. Slightly tamp down the remainder of the backfill as the hole is filled. Do not compact soil or damage roots by walking on wet soil.
- Apply 3 to 4 inches of organic mulch in a circle extending 2 to 3 feet from the trunk or to the dripline. Mulch improves the soil, reduces compaction, holds moisture, moderates soil temperatures and discourages injury from lawn mowers and weed whips. Keep mulch 6 inches away from the trunk. Water well after mulching. Do not place plastic under mulch.



Water well after mulching.



Stake only if needed.

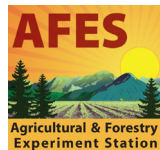
- Stake only if needed to stabilize the roots. Use smooth, wide, flexible material for ties that support the tree but allow it to sway; trees grow stronger root systems and trunks if allowed some wiggle room. Never place wire around the trunk, even in a rubber hose.

Secure ties as low on the trunk as they can be placed to stabilize roots, about one-third of the way up, generally just above the lowest branch on deciduous trees. Remove ties within one year or as soon as roots are firmly anchored and tree is stable without ties.

- Prune only dead and damaged branches at planting.
- Fertilizer is not recommended for newly planted trees. Watch for symptoms indicating that additional nutrients are needed.

Care For Your Trees

- Water trees during the first five years after planting if soil 4 inches down is dry.
- If the tree is staked, check ties regularly to be sure the trunk is not damaged. Remove ties after one growing season or as soon as roots are well anchored.
- Do not use de-icing salt near tree roots or where it will drain into the root zone. Remember, roots spread far beyond the drip line.
- Most landscape trees do well with little or no fertilizer. Use only if symptoms, such as little growth, indicate a need. First, be sure symptoms are not due to other causes, such as tree is planted too deep or needs more frequent watering.
- If symptoms indicate a need, apply slow release fertilizer in spring, early summer or late fall and follow product directions. Be cautious with fall fertilizing. Don't fertilize a stressed tree.



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