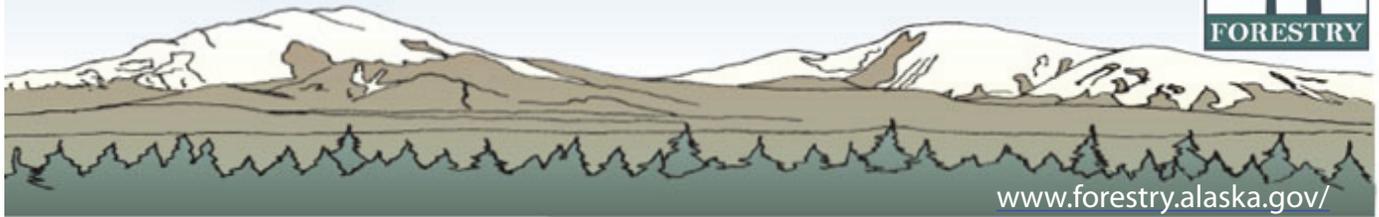
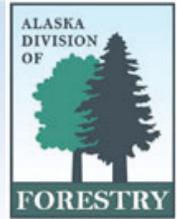


FIREWISE PRUNING



www.forestry.alaska.gov/

Many Alaskans live or have cabins in areas where wildfire is a threat. Proper pruning can help you create and maintain a safe space around your home.

Pruning trees to remove dead branches and other ladder fuels is just one way to make your landscape Firewise. This fact sheet explains proper pruning techniques that will help keep your trees healthy, attractive, and safe from wildfire. For more help in making your home and landscape Firewise, see the Firewise Alaska booklet: www.forestry.alaska.gov/pdfs/06Firewise.pdf.

Proper pruning can improve the appearance and condition of a tree, however, keep in mind that every pruning cut is a wound and it can alter the growth of the tree. Trees do not heal as animals do; they grow over and compartmentalize wounds, which remain with the tree for the rest of its life. Making improper cuts can cause permanent damage.

Trees get their energy from food they make in their leaves through the process of photosynthesis. Every pruning cut that removes live foliage decreases the tree's ability to make food and energy to support itself and grow. It is important that no more than one quarter of the live foliage be removed in one growing season, so that the tree can produce enough energy to close pruning wounds, defend itself against insects and disease, and carry out life processes. If you have a smaller tree from which you want to remove lower branches to allow clearance or remove ladder fuels, it may take a few years and multiple prunings to achieve the desired final crown height.

The best time to prune trees is during the dormant season, or in the middle of summer. Avoid pruning during the spring when the trees are beginning to leaf out, and the fall when they are dropping leaves. Spruce beetle adults are searching for new trees to lay eggs in during mid May through mid August, so do not prune spruce during that time.

When removing long branches that are greater than two inches in diameter or those that you cannot easily support by hand it is best to remove the weight of the branch before making the final cut. This prevents the branch from splitting and the bark tearing causing injury to the branch collar and trunk.

Make the first cut on the underside and a third of the way through the branch eight to ten inches out from where the branch attaches to the trunk or another branch. Make the second cut on the top of the branch, an inch or two further out from the first cut so that the branch snaps off leaving a stub. The third and final cut is made just outside the branch collar, the swelling at the base of a branch where it enters the trunk or a larger branch. The branch collar is the tree's defense zone against decay and should always be preserved in any pruning cut. When a proper cut is made, the collar will grow over the wound creating a circle of callous tissue and eventually seal the wound.

To reduce the length of a branch creating more space between trees and shrubs, shorten the limb back to another branch that is approximately the same size as the branch being removed. To make this cut properly you may need to remove the weight of the branch first. The final cut will be on an angle, almost parallel to the branch bark ridge (the ridge of bark in the crotch between the branch and stem). If it is necessary to remove more than half of the foliage on one branch, it is best to remove the entire branch.

Pruning can generate a lot of debris that should be disposed of properly so that it will not become fuel for a fire. It can be chipped and used for mulch or used as firewood and kindling. If you choose to pile and burn the material, consult your local fire department or Division of Forestry office for regulations, restrictions, and permits required before burning.

ZONES OF DEFENSE

Effective defensible space includes three zones of protection. For details about each zone, look to Firewise Alaska www.forestry.alaska.gov/pdfs/06Firewise.pdf and other publications on this topic. Below are important concepts for each zone.

ZONE 1: WITHIN 30 FEET OF STRUCTURE

Maintain deciduous trees and shrubs so that crowns are at least 10 feet apart to avoid the spread of fire from one to the other. Within this zone remove tree limbs within eight feet of the ground to prevent a ground fire from climbing into the canopy. Remove trees that are within 10 feet of your house and keep branches from at least 10 feet from the roof, chimney, or deck. All shrubs and groundcovers near buildings should be kept less than 18 inches tall. Remove all dead or broken branches and all dead or dying trees. Remove highly flammable plant material from this zone.

ZONE 2: 30~100 FEET FROM STRUCTURE

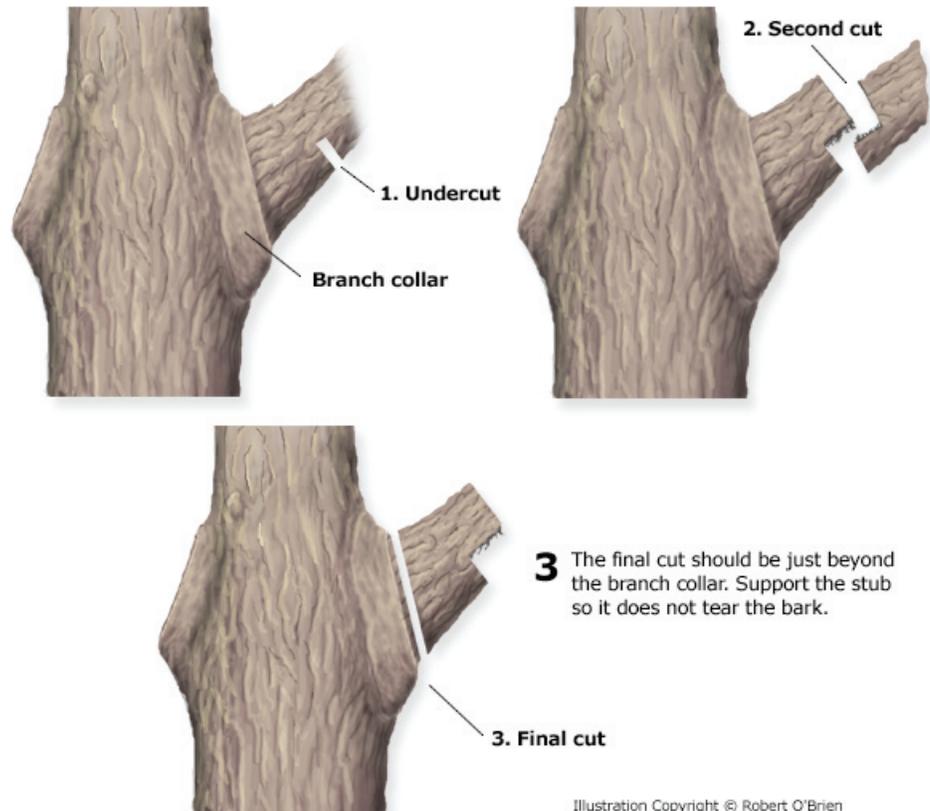
In Zone 2, maintain spacing of at least 10 feet between crowns. Limb trees up to 8 feet to help prevent a ground fire from tuning into a crown fire. Keep grasses short and space shrubs two to three times their mature height apart to break up the continuity of the fuels. They may cause a fire to burn at a lower intensity. Remove dead, dying, or unhealthy trees. Prune dead, rubbing, and broken branches from remaining trees. Limit the number of dead trees left as habitat snags in this area, as wildlife need only one or two per acre. Stack firewood away from trees and shrubs, and at least 30 feet from any structure.

ZONE 3: BEYOND 100 FEET FROM HOME

This is a transition zone between your defensible space and the surrounding area and extends to your property line. Pruning may not be necessary within this zone but you may wish to thin dense stands

Pruning a Large Limb

- 1** Undercut 8-10 inches from the branch collar. This stops the bark from tearing and damaging the branch collar and trunk tissue.
- 2** Make the second cut from the top all the way through the branch 2-3 inches above cut 1.



of trees, especially evergreens, and remove lower branches that are dead or could act as ladder fuels.

It is important that your access road and driveway be maintained to provide safe access for firefighters and their equipment. Clear vegetation from around street signs so that they are visible. Thin the number of trees along the driveway to maintain ten feet between crowns and remove dead or dying trees. Prune trees along the driveway and remove or shorten lower branches that could prevent fire fighting equipment from entering your property. Remember that they will need more room than the average sized vehicle.

FOR MORE INFORMATION

For more information about how to be Firewise visit the Division of Forestry's website at www.forestry.alaska.gov/ or <http://www.firewise.org/> or call your local fire department.

For information about tree pruning and care visit the Alaska Community Forestry Program website at www.forestry.alaska.gov/community/ or see www.treesaregood.com/.