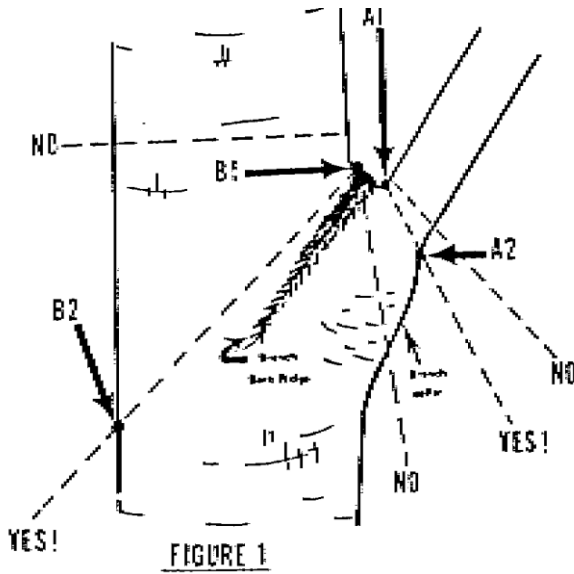




## HOW TO CORRECTLY PRUNE A TREE



Correct pruning of trees is a valuable maintenance tool and can help a tree stay healthy. Incorrect pruning can be harmful to a tree. In recent years, research has found that trees have a set of mechanisms which allow them to heal. Proper pruning cuts will not destroy these mechanisms but instead allow a tree to wall off the injured area with minimal internal damage.

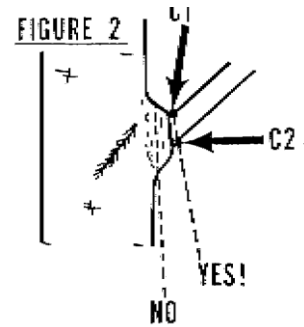
The branch bark ridge (Fig. 1) is the tissue which separates the branch from the main stem. This is one of your guides to proper pruning.

As a branch grows in length, it decreases in diameter. The tree will therefore form a protective layer in the wood around the base of the branch. This protective tissue is called the branch collar, your second guide to proper pruning.

The correct removal of a living branch does not injure the branch bark ridge or branch collar. To remove a living branch, you should place your shears or saw in front of the ridge at point A1 and cut downward and slightly outward to point A2, avoiding injury to the branch collar. Do not leave a stub.

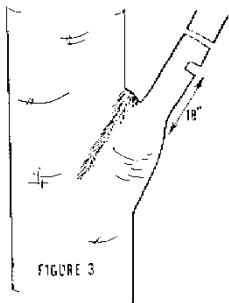
### DO NOT MAKE A FLUSH CUT!

A cut behind the branch bark ridge (flush cut) will not only injure the main stem but will also remove the internal chemical protective layer. When you remove this by a cut flush with the stem, tree-inhabiting microorganisms (which cause easy access to the wood above and below the branch. Besides decay, harsh internal cracks. These cracks may split outward later in the life of the tree.



stem but will protective layer decay) have cuts can cause

Removing a dead branch from a tree is accomplished in the same manner. Figure 2 shows a dead branch. Correct removal of the dead branch is accomplished by cutting it from point C1 to point C2. Notice that the cut is



made so no injury occurs to the newly forming callus tissue but at the same time no stub is left.

If the branch to be removed is large, it is helpful to eliminate the outer portions first (fig.3). Make a cut 18" from the main stem to the underside of the branch. This cut should be approximately 1/3 the branch diameter. Now make a cut from the top starting a few inches out from your first cut. Cut completely through at this point. By cutting in this manner, you avoid the possibility of the branch snapping and causing the bark to tear away from the main stem.

### DO NOT PAINT THE WOUND

Research has found that tree-wound paints do not prevent decay.

The best time for pruning most trees is at the end of the dormant period (March) or during the summer months. Avoid pruning during the time leaves are expanding to their normal size and during wet weather. The above concepts on branch removal and wood healing are the work of Dr. Alex Shigo, Chief Scientist of the United States Forest Services Northeast Forest Experiment Station in Durham, New Hampshire.