## **Pruning Old Apple Trees**

By Mark Longstroth and Bill Shane, Michigan State University Extension Fruit Educators

In renovation old apple trees, it is to consider it a 3 year job. The goal is to remove about a third of what you want out each year rather than make lots of big cuts in one year. If too much pruning is done in the first year it may result in over-vigor growth that you have to cut out over the next 3 or 4 years.

The first step is to shorten the tree. Depending on size of the tree this may be accomplished with one or two large chain saw cuts in the top of the tree to let light into the interior. You need to figure out how tall you want the tree to be. For a big old tree the target may be 12-16 feet. Look into the top of the tree and look for a smaller branch coming off the main stem. The side branch will be the new top. Cut the old top back to the side branch. This side branch will really grow once its competition is cut away.

On tall trees it is recommended to a 2 to 4 ladder bays into the tree so you can get a ladder into the interior. The bays allow light into the tree's interior to stimulate growth in the areas that has been in the shade for years. You can remove whole limbs that are too close to its neighbor or cross over it. Try to avoid getting involved with fine detail pruning—tackle the big issues first. Remember to cut off only about a third of the old wood.

The next year repeat the process thinning and shortening the vigorous top and removing cross overs and crossing branches below. Then in the third year you can focus more on opening up lower portion of the tree. Hopefully by then you will have the tree into a manageable size.

Leave an upright growing shoot at the ends of branch to provide a vigor sink. You may need to cut them out and replace with another upright.

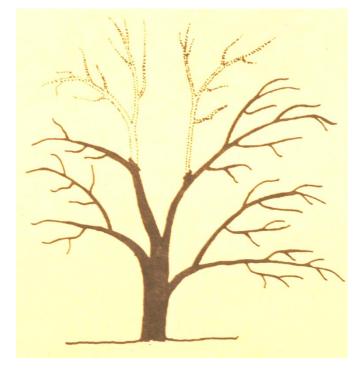


Figure 1. Remove upright limbs but keep "boss" limbs above the cut point to control regrowth at cut point



Year 1. Before pruning. The goal is to bring the top down and to remove some of the scaffolds (major limbs).



Year 1. After pruning



Year 2. Before pruning. The goal is to remove excess large branches off the scaffolds.



Year 2. After pruning.