

TRAINING OF YOUNG WALNUT TREES

Desirably shaped mature trees do not occur by chance. They are, instead, the result of years of careful selection and training. When training a young walnut tree it is important to remember you are working towards a tree that is well-shaped for convenience and economy in orchard management.

Too many walnut trees have had their pruning neglected until they are several years old. When this is done, many severe cuts are often necessary in order to bring the tree into somewhat of the desired shape

First Winter Pruning

At the end of the first summer, The tree may be from 4 to 8 feet tall. No heading is usually necessary. By heading, this means a cut such as (a) in Figure 1 . A tall trunk is an advantage. Heading would tend to force out laterals which would be too low on the trunk so it is therefore not desirable. Permanent lateral branches should be selected so that the lowest will be no closer than 4 1/2 feet from the ground and preferably 5 to 6 feet from the ground. Stakes by which the trees are held into the wind are usually needed. (See figure 3 on page 2 of this guide)

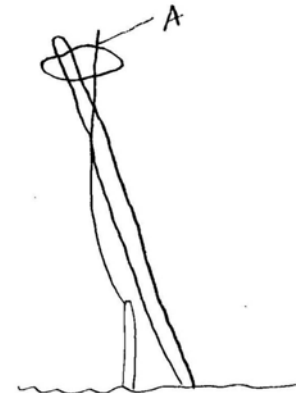


FIGURE 1

Summer Pinching

Shoots developing below the desired level of the first permanent scaffold or branch should not be removed when they have developed. A better system would be to pinch back the shoots when they attain a length of about 15 inches. Pinching back is simply meant to break off the tip. This leaf surface that is maintained will help to build the trunk and root system while at the same time protects the trunk from sunburn.

Second Dormant Pruning

At the second dormant pruning, all laterals below 5 feet should be cut back to a 6-inch stub such as in Figure 2. At this pruning, there may or may not be any branches which are high enough to become permanent laterals. By not removing them completely at this time, the tree will benefit by the extra leaf surfaces the following season and will also receive sunburn protection.

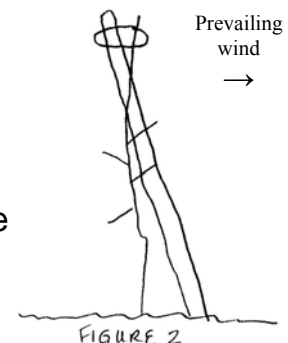


FIGURE 2

Second Dormant Pruning cont

It is desirable that the lowest permanent lateral should be on the windward side of the tree. In Stanislaus County this branch is best located on the north-west side of the tree. This process of selecting the desired frame work may take a two or three-year period. The tendency, for most walnut varieties to spread and droop makes a high head desirable and does not result in a higher tree. A wide vertical spacing between the branches is preferred. A distance of about two feet seems advisable. Branches should be selected from wood which is at least one year younger than the trunk. Branches that are same age as the trunk are poor and easily split off. They should be removed entirely at the dormant pruning. Permanent branches should form a fairly wide angle with the trunk. These branches are more strongly attached and will make sturdier framework.

Third Growing Season

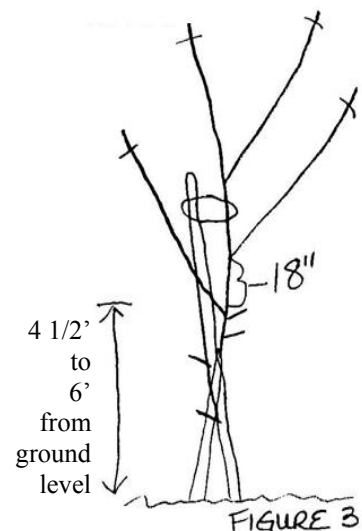
During the third growing season, summer pinching may again be beneficial. Shoots arising from the lower portion of the trunk or from the stubs that were left at the winter pruning should be pinched back when they attain a length of about 15 inches. Here again the extra leaf surface means a sturdier trunk and affords sun burn protection.

Third Dormant Pruning

During the third dormant pruning the selection of the permanent branches is usually completed. Four or five branches that are well-distributed vertically along the trunk, such as in Figure3, are enough. These should be evenly distributed around the trunk.

Certain varieties, such as the Payne and Hartley, tend to set nuts laterally along the shoots. Long growing branches on these two varieties may have the tips headed back to prevent excessive weight during the fourth growing season. An example of such nuts is (a) in Figure3. The growth resulting below the first permanent branch may again be cut back to a six inch stub.

If the stubs from the previous year are getting very large, they should be removed completely. In judging as to whether or not to remove the stub, a good rule to follow is this: Stub should be removed while they can still be done with the pruning shears. If it is felt that a pruning saw will be needed, if the stubs are left for another year they should be cut off then and there.



Fourth and Subsequent Dormant Pruning

During, the fourth and subsequent dormant pruning's, crossing and interfering branches should be removed. Usually all stubs should be removed by this time. Laterals from the permanent branches should be selected so as to form a tree such as in Figure 4.

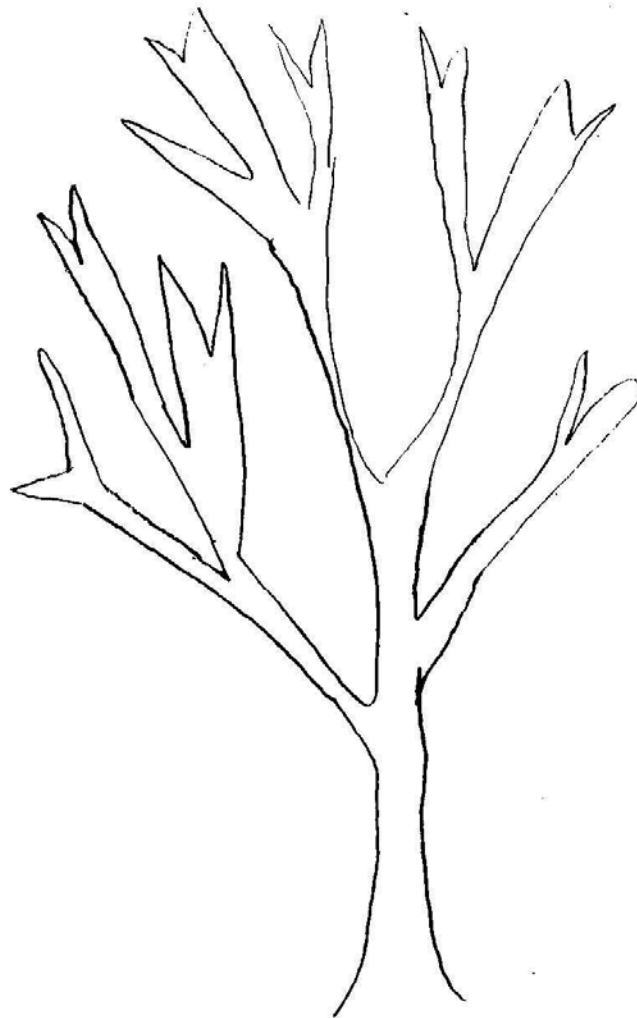


FIGURE 4

