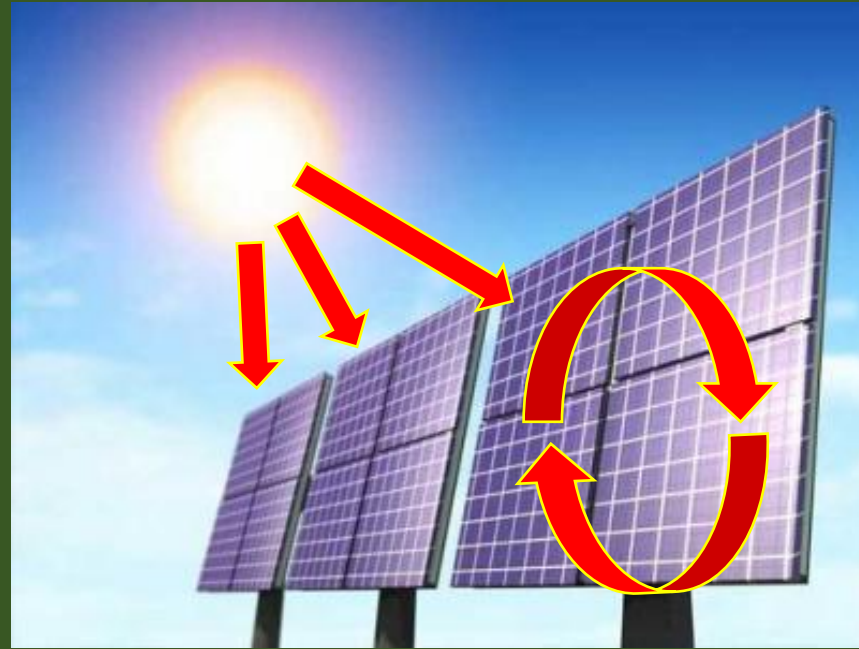


Basics of Pruning & Training

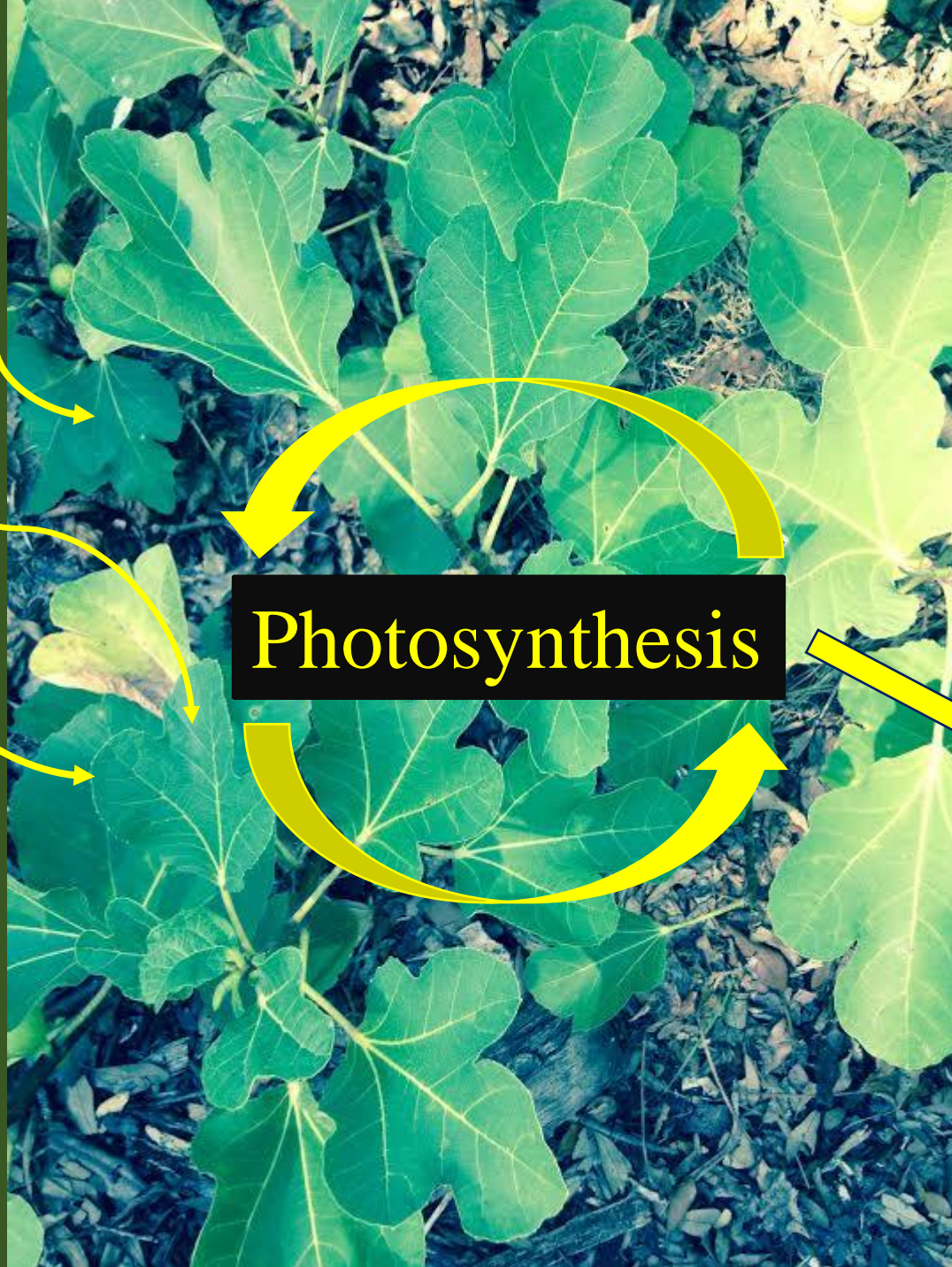
Kerry D. Heafner
Area Horticulturist
704 Cypress Street
West Monroe, LA
71291



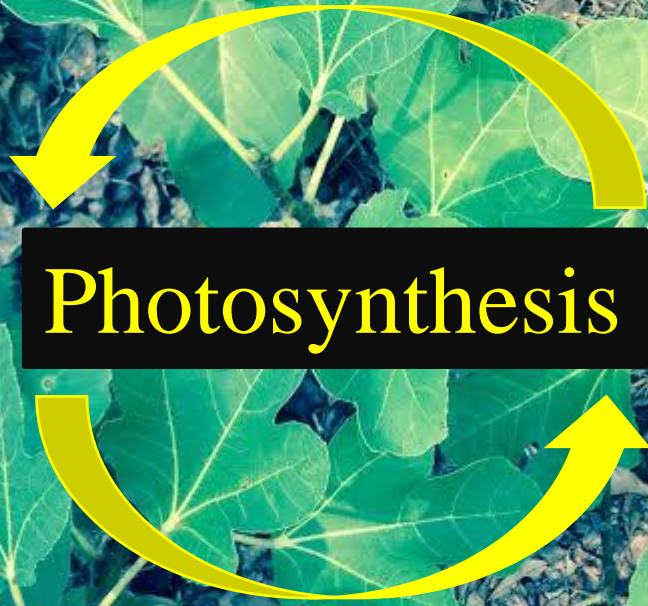
Prune and train fruit trees to harvest sunlight!



**Energy
used by us!**



Photosynthesis



**Leaves
harvest
sunlight.**



Pruning vs. Training

Pruning: removing a portion of a tree to correct or maintain structure.

Training: directing growth into a desired shape and form.

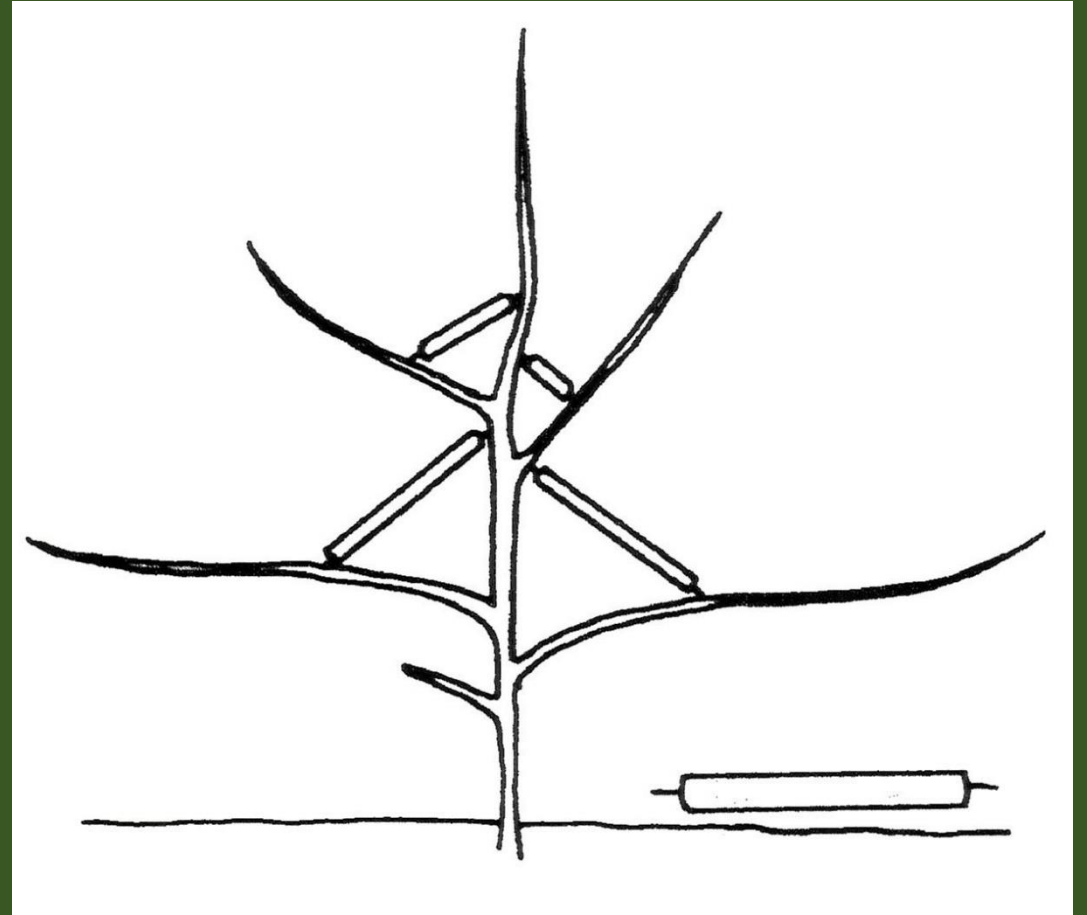
Why prune?

- To improve the overall health of the tree or shrub by removing:
 - Dead branches.
 - Decayed branches.
 - Diseased branches.
 - Damaged branches.
 - The 4 Ds.
- To promote flower/fruit production.
- To control for size and shape.
- To improve air circulation.



Why train?

- To maximize incident sunlight & good air circulation.
- To promote fruit production.
- To build tree/branch strength.



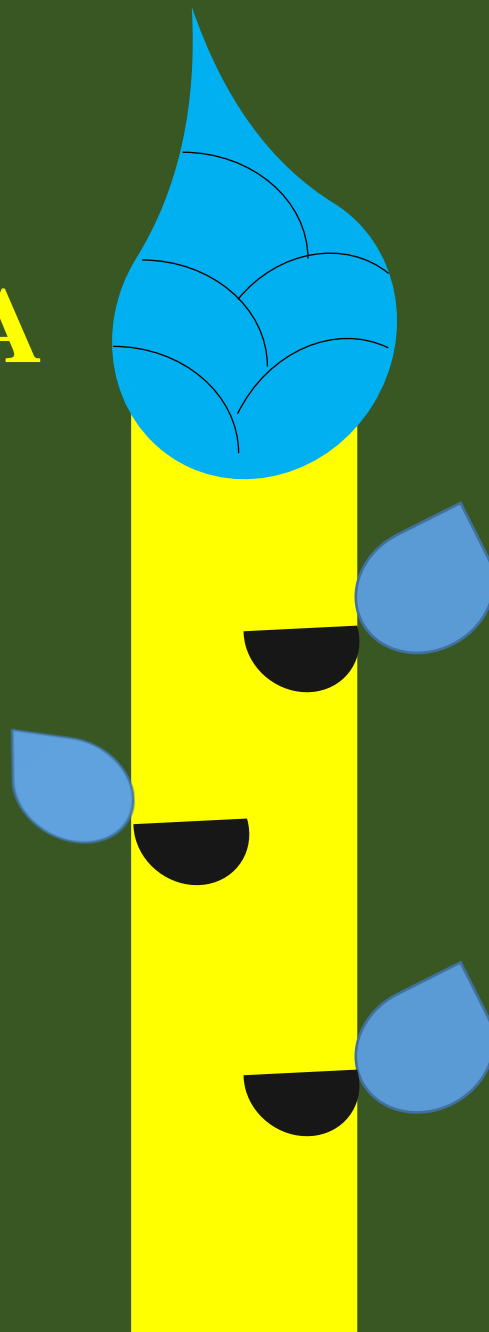
Two types of pruning cuts:

- Heading cut
 - Removes the terminal (apical) bud.
 - Promotes later branch/bud development.
 - Laterals are fruit and flower producers.
- Thinning cut
 - Removes an entire branch back to either a side shoot or the leader (central stem).



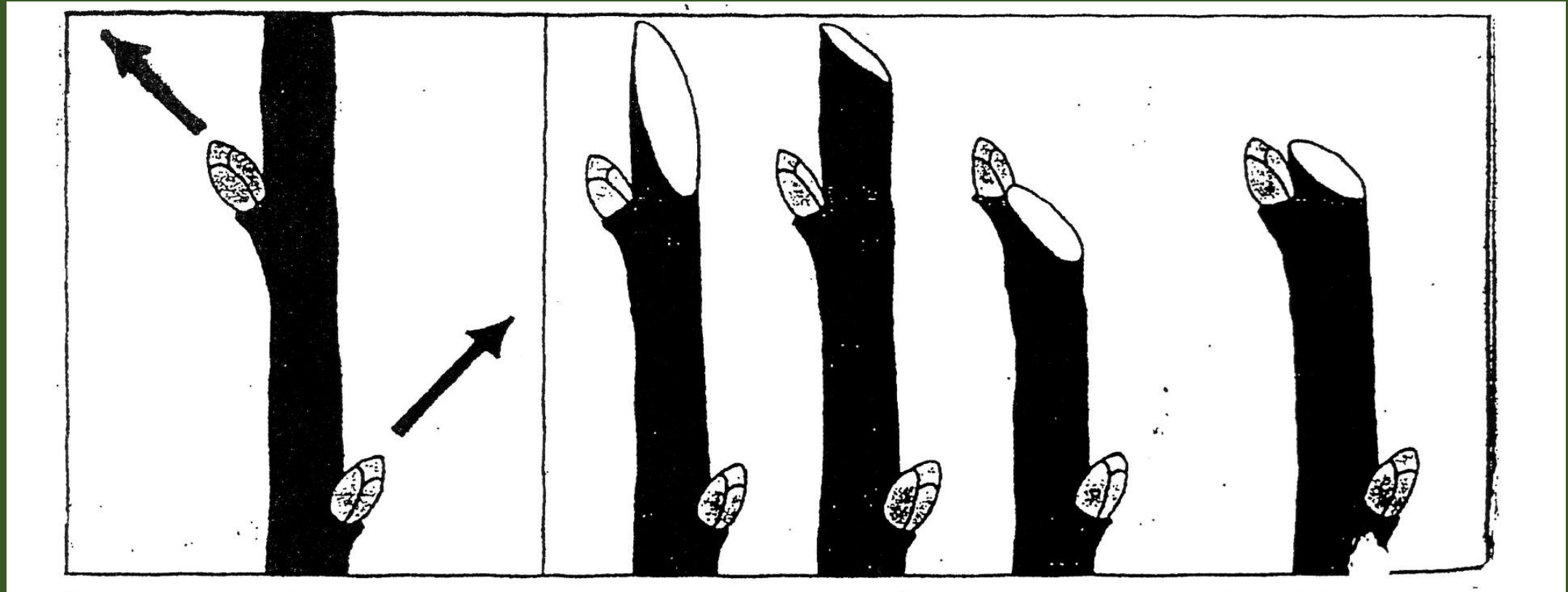
Heading Cuts

IAA



IAA (auxin) suppresses lateral branch growth. If the bud is removed, then lateral branches develop.

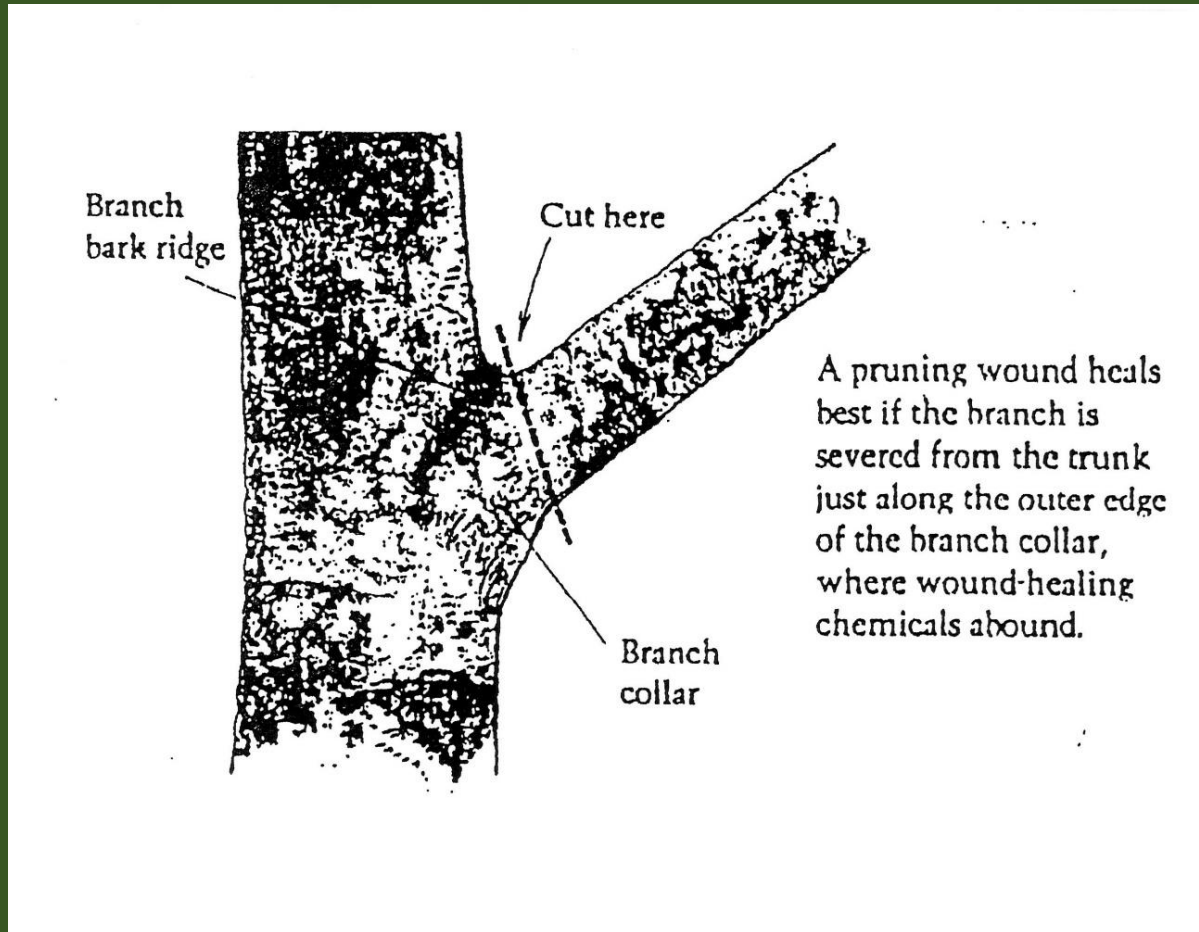
Heading Cut: cut to a bud



Incorrect cuts

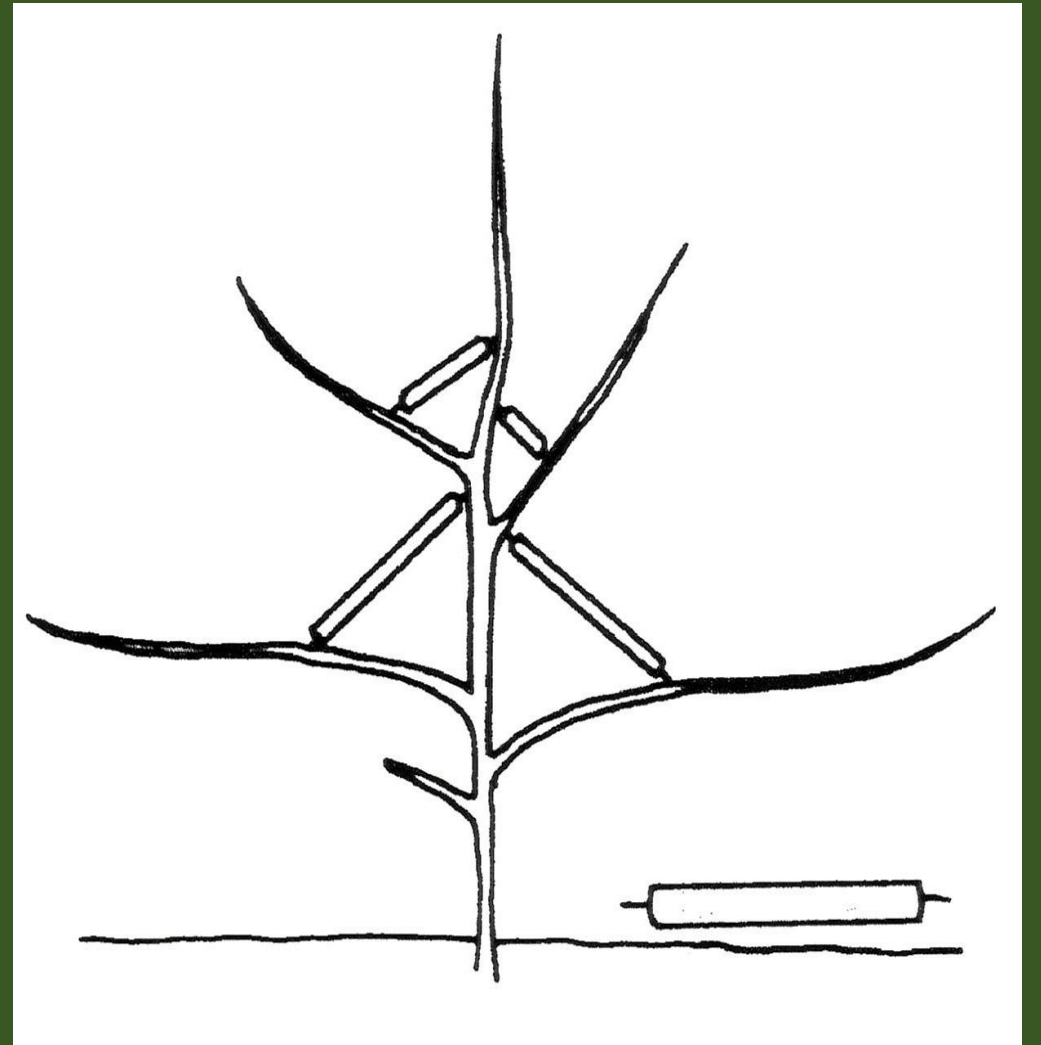
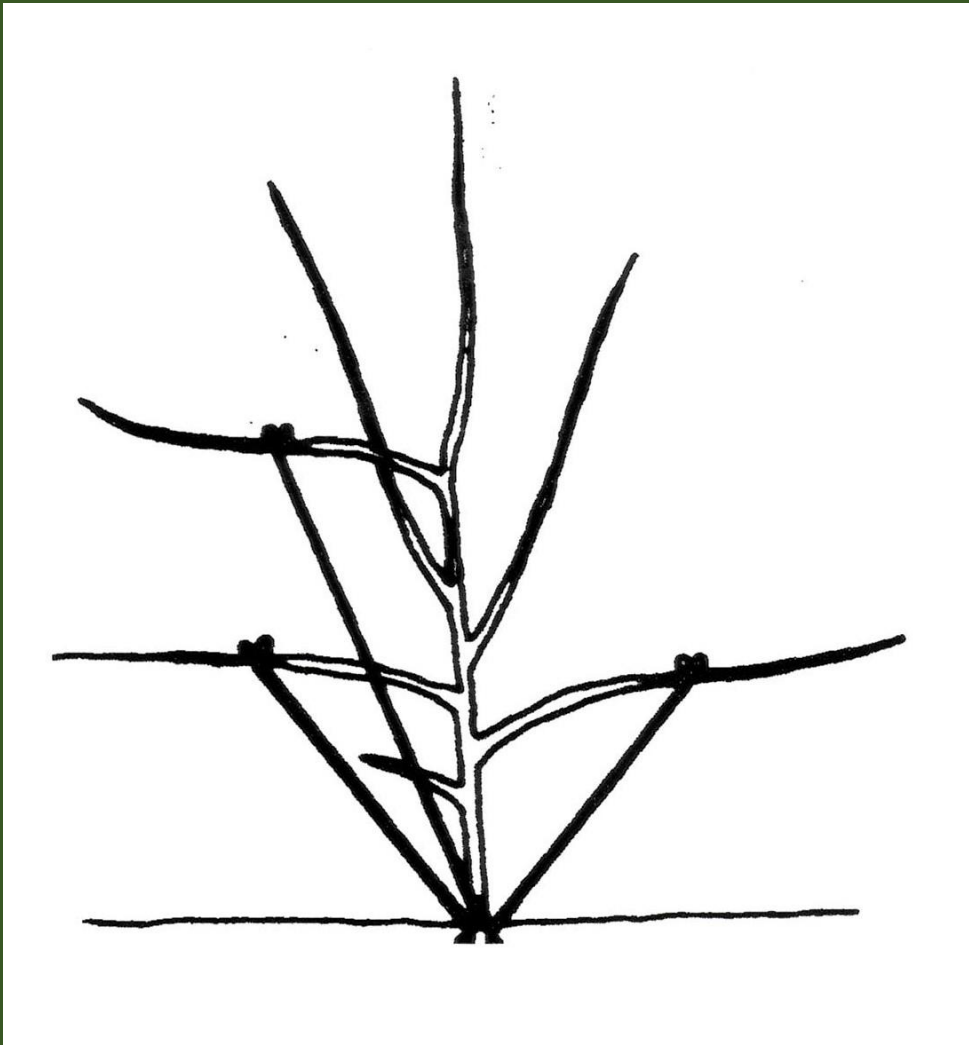
Correct cut

Thinning Cuts



- Bark ridge: ridge on top of the branch/trunk interface.
- Branch collar: swollen area on the underside of the branch/trunk interface.
- Cut parallel to the bark ridge and branch collar.
- The tree will seal the wound itself.
- Synthetic sealers aren't necessary.

Two ways to train scaffold branches.

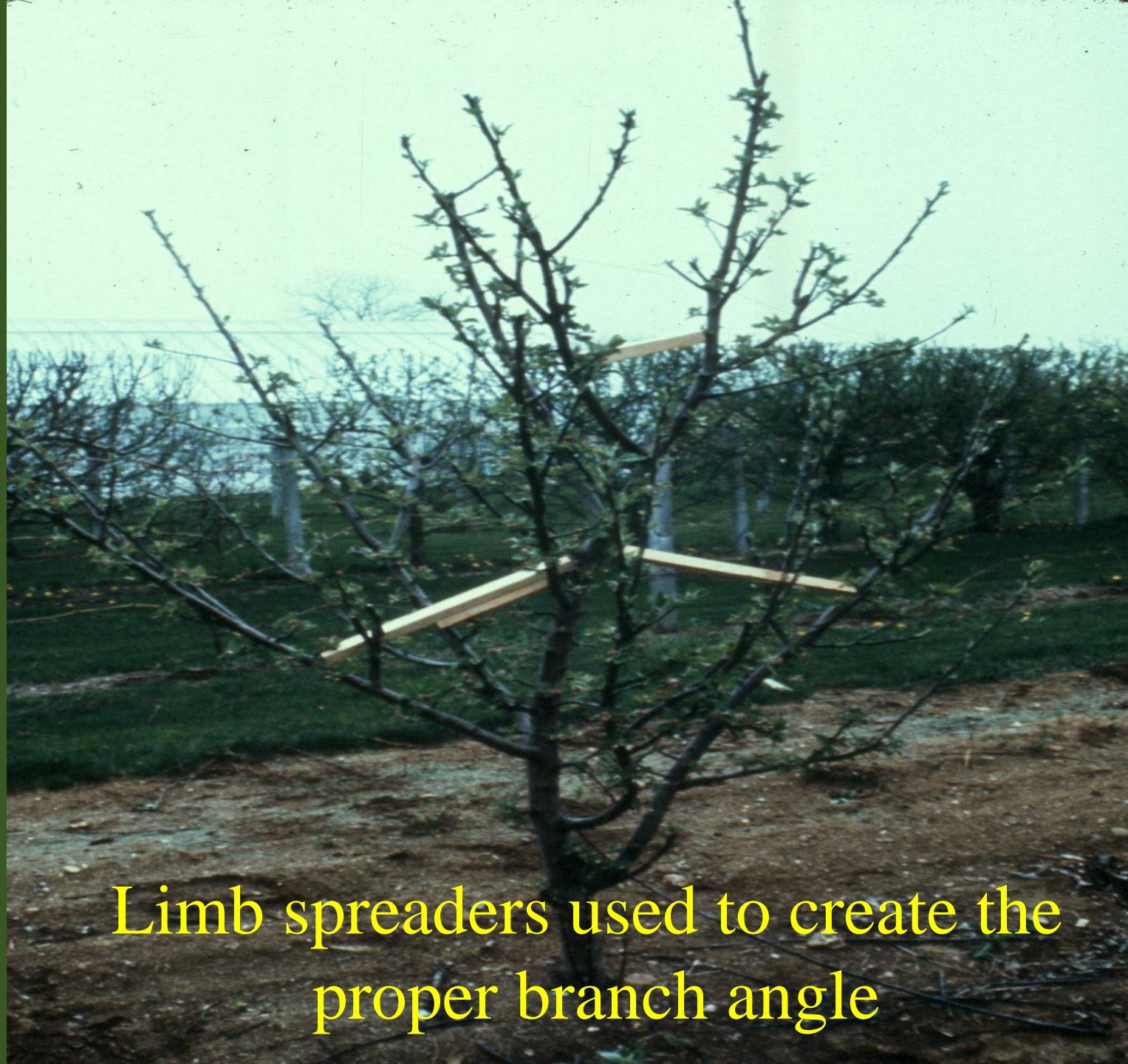


Clothes pins used to create the proper branch angle



**Weight used to create the proper
branch angle.**





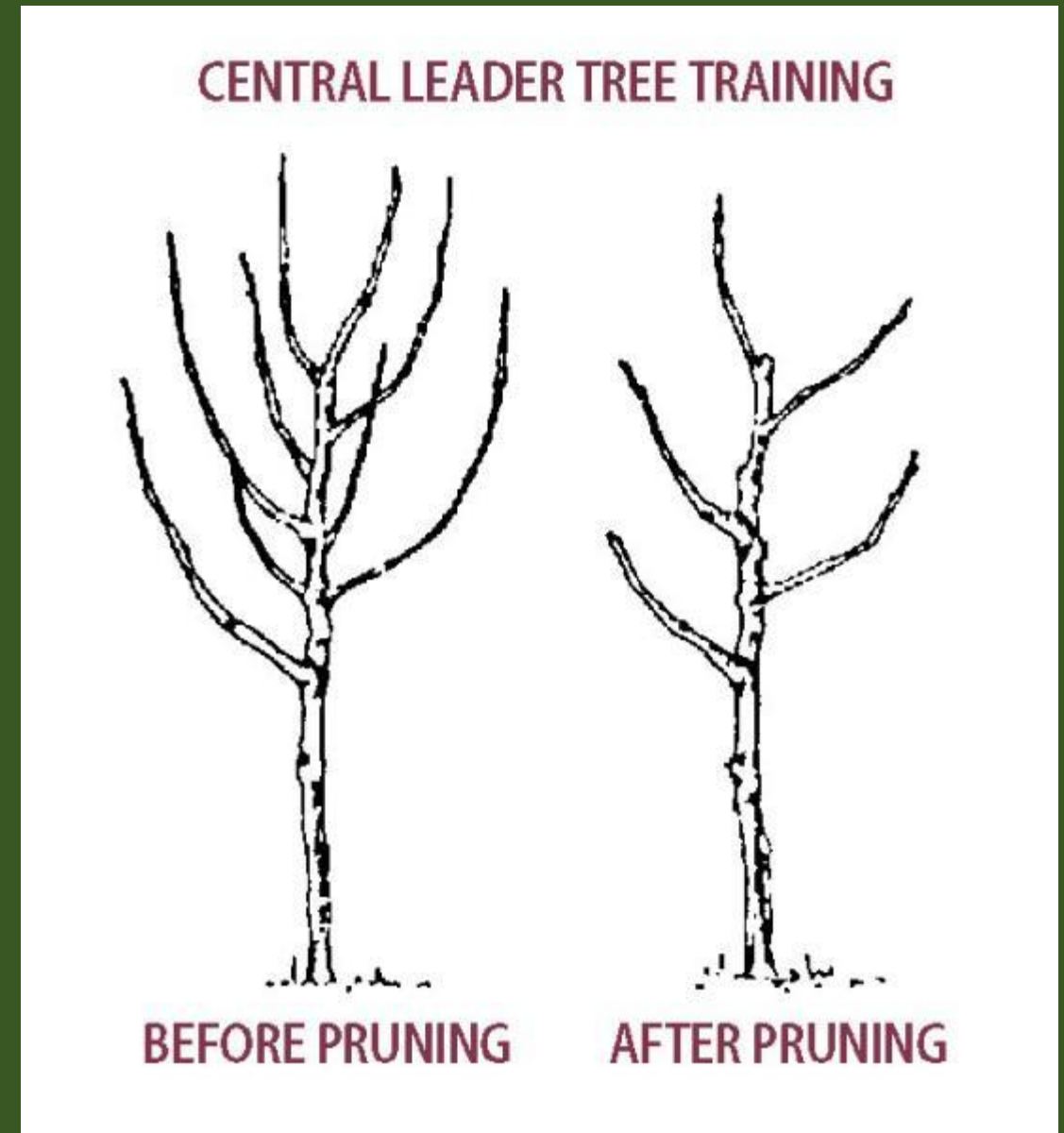
Limb spreaders used to create the proper branch angle

Pruning and Training Fruit Trees

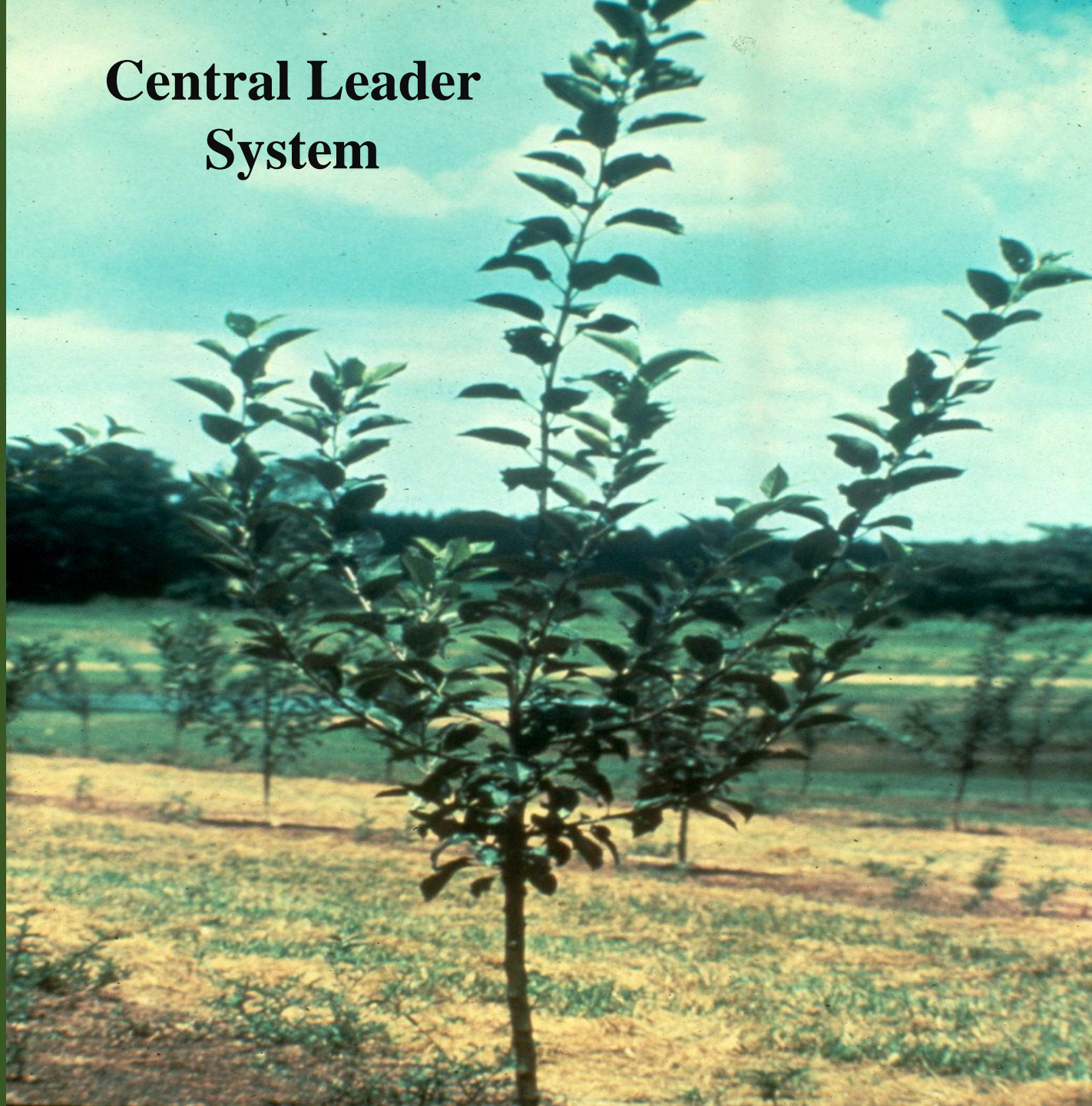
- Fruit trees are pruned and trained to one of two basic structures:
- Central leader system:
 - one central trunk with lateral branches spaced along it. The tree will have a pyramidal shape (ex. apple).
- Open center system:
 - several main scaffold branches arising from a short trunk (ex. peach).



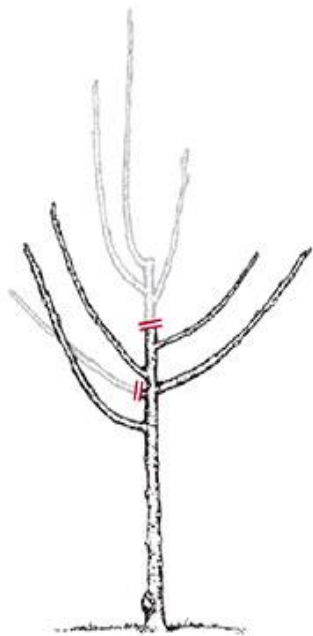
- One vertical stem or trunk.
- Multiple scaffold (lateral) branches.
 - These will be your fruit producers.
- Scaffold branches should be as horizontal as possible.



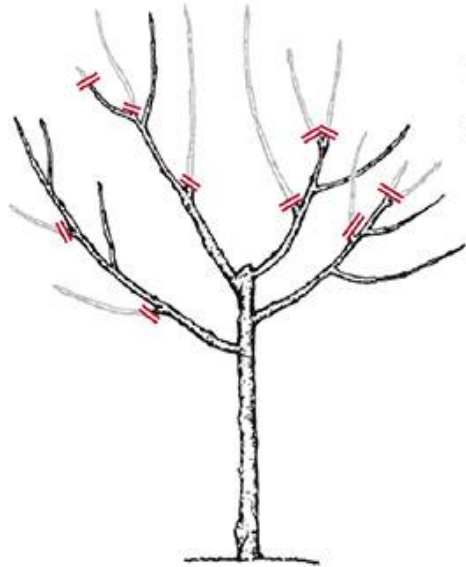
Central Leader System



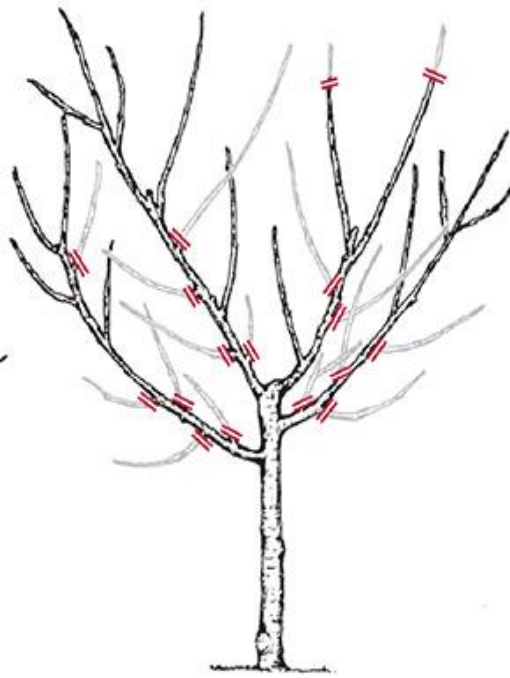




*First year
spring*



*Second year
spring*



*Third year
spring*

Open center pruning

- Shortened vertical trunk.
- Mostly lateral branches in a fanned-out pattern.
- Position of scaffold branches makes harvesting easier.



Before



After



Peaches trained to a central leader.







Fruit Tree Pruning Summary

- 1. Remove Diseased, Dead, Damaged, Decayed.
- 2. Remove one of two branches that cross each other.
- 3. Remove water sprouts/vertical growth.
- 4. Remove branches growing back into the canopy.
- 5. Remember thinning vs. heading cuts.
- 6. Cut branches parallel to the bark ridge & branch collar.

