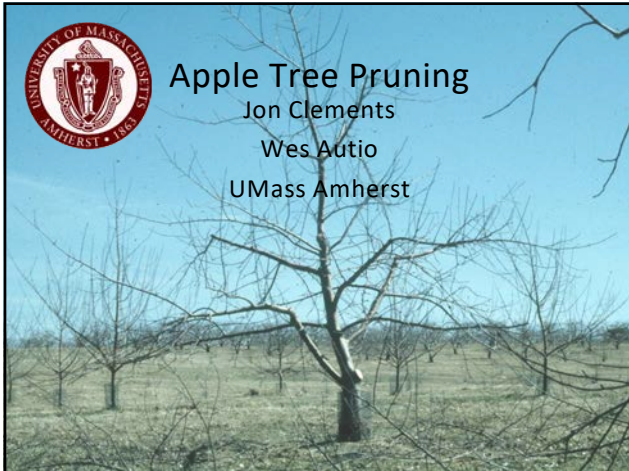




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Pruning/Training – Why?

- Better sunlight and air flow
- Maximum fruit bearing surface
- Encourage stronger scaffold branches
 - To better hold fruit and human(?) weight
- Better shape tree for thinning and harvesting fruit

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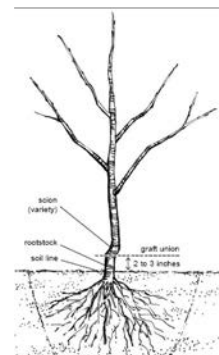
Pruning/Training – Why?

- Create pleasing and useful shape
- Pest management is easier
- Maintain and renew fruiting wood
- Keep growth/vigor consistent in all parts of the tree

3

Fruit Tree PHYSIOLOGY

- Roots/rootstock
- Graft union
- Scion
- Scaffold branches
- Lateral branches
- Fruit buds/spurs
- Branch collar
- Water sprouts
- Root suckers



4

ASK BEFORE MAKING ANY CUTS

- What kind of fruit tree is it?
- Apple? Cherry? Pear? Plum?
- Peach? Nectarine?
- Where does the fruit tree set it's fruit?
- New growth? Old growth? 1-2-3 year old growth? Only at tips of branches? Fruit spurs?
- Apple/pear: fruit spurs on 2+ year-old-wood (unless tip-bearing)
- Plum/cherry/peach: new growth/fruit spurs on 1+ year old wood

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Fruiting habit - APPLE

- Apple fruits on two year old and older wood
- Flower buds develop on spurs (short shoots) on two year old and older wood
- Best fruit occurs on 2-, 3-, 4-year old wood
- Buds/spurs weaken as they get older
- Shade is your enemy
- Horizontal wood preferred over vertical wood

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APPLE – fruiting habit

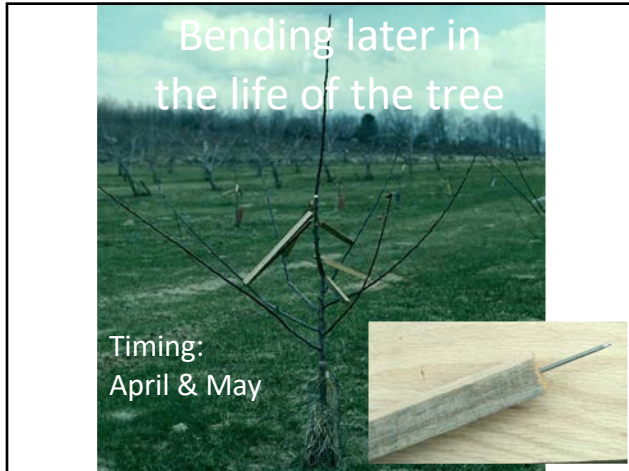


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PRUNING vs. TRAINING

- Pruning – cuts made on a tree to maintain and renew fruiting wood
- Training – development of fruit bearing structure on new trees
- TRAIN first, PRUNE second

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FRUIT TREE PRUNING TERMS

- Heading
- Thinning
- 1/3 rule aka the pruning “budget”
- 3 D’s (Dead, Diseased, Damaged)
- RE-LEADERING?
- 1-2-3 cut for big branches

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APPLE pruning – goals

- Create a balance between fruiting wood and new shoot growth (which will become fruiting wood)
- Remove old wood, stimulate new growth
- Create an even light environment (as possible) throughout tree
- Open up tree for spraying, etc.
- Create a structure to support crop load

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APPLE pruning – basics

- Central leader tree
- Cone shape tree
- Dormant pruning (January-April) more invigorating than summer pruning (July)
- Heading cuts increase vigorous response at location of cut
- Thinning cuts are more desirable because they create balance between new and older wood
- !!!Thinning cuts are almost always preferable to heading cuts!!!

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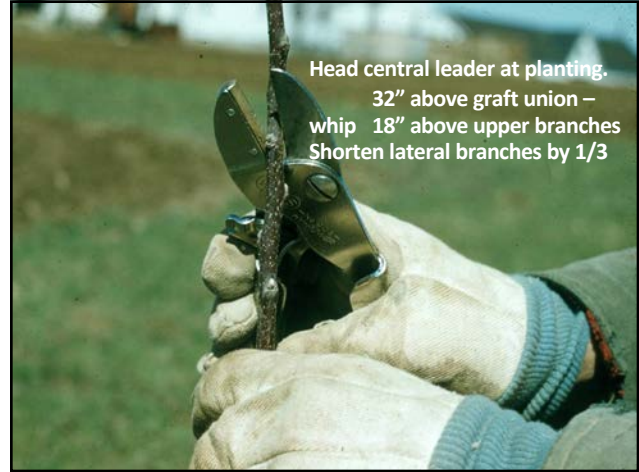
APPLE – central leader

Note:

- Dominant central leader (trunk)
- Branches get smaller as you move up the tree (cone or Christmas tree shape)
- Permanent “scaffold” branches at bottom
- Smaller, shorter branches as you move up the tree, may be permanent or temporary



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Head central leader at planting.
 32" above graft union –
 whip 18" above upper branches
 Shorten lateral branches by 1/3

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Early Bending

- Distributes vigor
- Develops good crotch angles
- Timing: early June

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Young Apple Trees

- Almost no pruning is required
- Maintain dominance of central trunk
 - Remove direct competitors
 - Apply 2-to-1 Rule
- Remove bad crotch angles
- Timing:
 - Spring through early summer

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Seven Simple Rules for Apple Pruning

Optimal timing: February-May

1. Remove 2-3 of the largest limbs in the top 2/3's
2. Use the 2-to-1 rule
3. Avoid stubbing (or heading) cuts
4. Simplify branches
5. Remove drooping branches
6. Remove branches growing straight up
7. Maintain central leader

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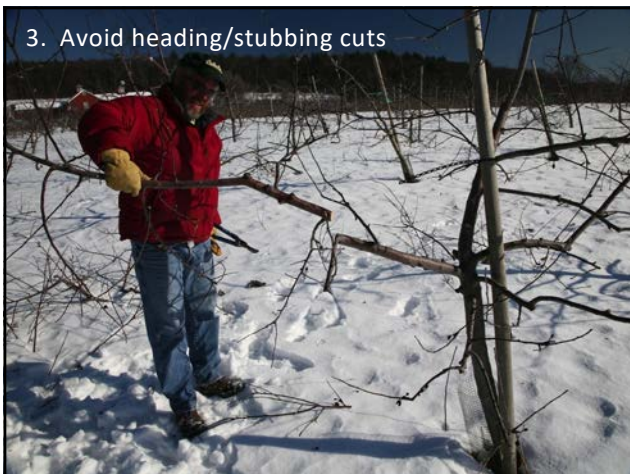
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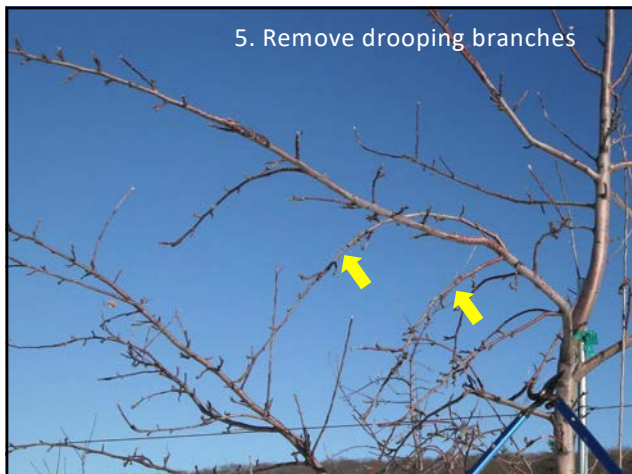
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PRUNING: Recap

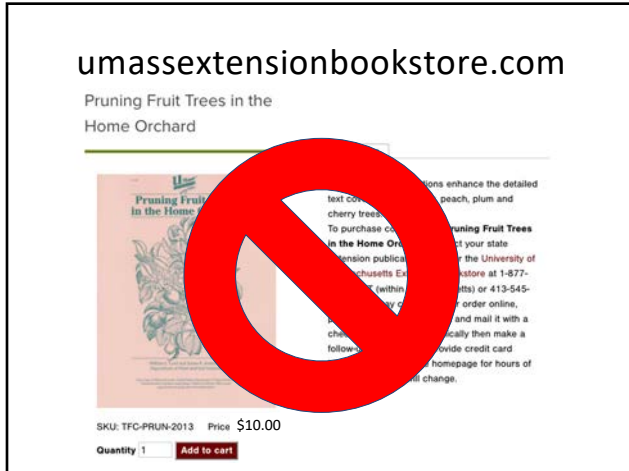
- Tree budget only 1/3 of canopy each year. More than 30% = rampant growth!
- 3 D's – Dead, Diseased, Damaged – OUT!
- More thinning cuts, less heading cuts
- 3-5 year process to transition
- Too big? Consider cutting down, replanting, or grafting

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Pruning peach trees

- Peaches flower and fruit on last year's shoot growth; pencil-diameter wood is ideal
- Peaches want to grow up and out following the sunlight; therefore, interior canopy shade is your enemy
- Avoid heading cuts, use thinning cuts, direct growth outward, keep height down
- 12-o'clock high are OUT!

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