Pruning Stone Fruit

Ron Perry
MSU Hort

Pruning Fruit Trees

• Developing and Training Young trees
  – Follow a plan or system… the most common historically for Stone Fruit is:
    Open Center (Peach, Nectarine, Apricot, Japanese Plums)
    Modified Central Leader (Prune Plum, Cherry)

• Pruning and maintaining mature trees
• Renovating older trees for an orchard or for the homeowner
Sour Cherry; Modified Central Leader

Buds are simple like peach, with flowers forming on last year branches or spurs

Sweet Cherry only bares blossoms / fruit on spurs
Open Center System (Vase)

- Traditional system from Europe.
- Used for fruit crops with canopies with a spreading habit: peach, nectarine, apricot, Japanese plums
- Can be applied to other crops; pears, apples, etc.
- Sacrifice crop production in early years to develop framework.
- Trunk is central axis for only first 24-30”, bifurcates to 3-4 primary scaffolds
- Requires a strategic understanding in developing frame.
Peach buds are simple and form on last year growth only.

Leaf buds

Leaf buds in center blossom buds on side

Peach/Nectarine branches
Peach bares on only last year growth: Apricot & Plum plus young spurs: renew growth

Open Center System

Wide angle crotch at 24 “
Open Center System

Overhead view

Trunk

Each scaffold = 36” long

Wide angle crotch at 24 “

Open Center scaffolds
Open Center scaffolds

Side view

Trunk 24 “
Bacterial canker influences pruning and scaffold / tree survival in Midwest and Eastern US

- Avoid by physically spreading branches in branch development phase.
- Avoid development of narrow crotch which causes “bark inclusion”.
- Included bark is where both cold injury and Bacterial Canker develop.

“Reduction” Cut or “Bench” Cut

- Redirect growth to outward / away from central part of tree.
- Can be a problem if thinning cut is made too close to lateral.
- Encourages weakness
Reduction Cut or Bench Cut

Traditional Open Center System in California

Girdling Nectarines to Increase fruit size
Taturra System Developed in Australia was the first “Y” System

Open Center: Peach, Apricot, Plums

Modified OC; high density version = “Y” System
Y System in California

Y System in California
Older orchard of peaches in Y system

Vase or Open Center

Peach

Pears
OC used in Almonds

OC used in Apples