Tree Fruit for Pender County

Apples, Pears, Figs, Peaches, Nectarines, Plums
Tree Fruit

- Most are budded or grafted
- **Rootstock** = chosen for disease mgmt or size mgmt
- **Scion** = desirable variety
- If scion dies, just left with rootstock
- Shoots from below **graft union** are rootstock
Proper Tree Planting

- Too Deep
- Hole Too Small
- Roots Not Pruned

Correct
Figs

- Very Easy
- Self Fruitful
- Not grafted (easy to root from cuttings)
- Grown as a bush
  - Little to no pruning except to remove broken or rubbing branches
- Sun, well drained soil, pH ~ 6
- Long lived
Figs

- Add organic matter to sandy soils
- Mulch heavily to hold moisture
- Space 10’ apart
- Main problem – fruit drop
  - Root Knot Nematode
  - Drought – causes fruit to drop
    - Water during dry periods
  - Fertilization – causes fruit to split, generally do not fertilize – add organic matter
Figs

- **Root Knot Nematode**
  - Microscopic worms that live in soil and feed on plants – like leeches
  - No way to eradicate
  - Can spread by moving infested soil and plants
  - Can test for nematodes through NCDA, $5

Roots infested with RKN are knotted and galled
Fig Varieties

- **Celeste** – considered best for fresh eating
  - Bears in June/July
  - ‘Alma’ very similar

- **Brown Turkey**
  - Bears in June
  - Better for preserves

- May take 3-4 years to bear
Asian Persimmon

- Easy, productive
- Sun, well drained soil
- Target pH ~ 6.0
- Space 12’-15’ apart, grow 10’-20’ tall
- Begin bearing 3-5 years, live 10-20 years
- Minimal pruning
- Bear in fall
Asian Persimmon

- Self fruitful, but cross pollination recommended (2 varieties)
- Varieties are classified as astringent (must be completely soft before eating) and nonastringent
- **Recommended varieties**: Jiro, Hanagoshio, Fuyu - all are non astringent
Plums

- Sun, well drained soil
- Target pH 6.5
- Relatively short lived, 10 – 20 years, begin bearing in 4-5 years
- Space 20’ apart
- **Tend to bloom very early** - frost often damages blossoms
- Trained and pruned to the open center system – like peaches
Plums

- Brown rot a problem – spray with fungicides
- Two varieties give better fruit set

**Recommended Varieties:**
- Methley - tend to bloom early
- Auburn varieties: AU Amber, AU Homeside, AU Roadside, AU Producer
- Morris
- Frontier
Apples and Pears

- Pears easier than apples
- Apples don’t color well (red) under warm night conditions
- Dwarfing rootstocks for apples – will keep trees smaller
- Apples require regular spray program
- Both are trained as central leader
- Thin fruit for quality
Pears

- Full sun, well drained soil
- Target pH 6.5
- Only semi dwarfing rootstock available
- Take 5-9 years to bear (earlier on dwarfing rootstock), live 35+ years
- Space 20’ apart
- Often set too many fruit
Pears

- Require little to no fertilizer
- Too much vigor can be a problem on rich soils
- Bear fruit on spurs
Pear Varieties

- Plant 2 different varieties for best fruit set
- Only choose fireblight resistant varieties! (all grocery store varieties are highly susceptible!)
Fireblight caused by Erwinia

Common on pears and apples, occasional on Loquat

Infests in spring - causes Shepherds Hook appearance
Asian Pears

- Crisper and juicier than regular pears
- Culture similar
- Fireblight main problem
- Varieties:
  - Shinseiki, Hosui, Kosui
Apples

- More challenging – more pesticides
- Insecticide applications just after petal fall and 2 weeks later critical
- Need more than one variety for pollination – ‘Golden Delicious’ good pollinator
- Rootstock has tremendous effect on size and bearing age (3 to 6 years)
Effect of Rootstock on Apples

Shown as % of normal size (~20’-30’ tall and wide)

Spacing: Dwarf – 4’ to 8’ apart, often need support
Semi Dwarf – 6’ to 12’ apart
Standard – 18’ to 20’ apart
Training Apples

- Central leader with evenly spaced scaffold branches
- Branches at 45° to 90° angles
  - Space with toothpicks when young
Apple Varieties for SE NC

- Golden Delicious, Ginger Gold
- Red Delicious
- Gala (Fireblight a problem)
- Braeburn
- Fuji
- Granny Smith
Fruit Thinning

- Must Thin Fruit for Optimal Fruit Quality & Tree Structure (peaches, apples)
- Only Need:
  - 20% Of Blossoms For Full Crop Of Apples
  - 12 - 15% Of Blossoms For Full Crop Of Peaches
- Thin Fruit With 4 - 6 in. Between Fruit
- Thin Early For Optimal Size
Proper Fruit Thinning
Peaches and Nectarines

- Very challenging to grow – intensive pesticide program
- Always test for nematodes before planting
- Full sun, well drained soil!!!
- Start bearing in 2 – 4 years
- Tend to be short lived (~15 years)
Choosing Peach Varieties

Consider:

- Chilling Hours
- Early – mid – late season
- Freestone or Cling (early)
- White or Yellow Flesh
- Bacterial Leaf Spot Resistance
- Many varieties part of NC Breeding program (NC Sandhills – town names)
Peach Varieties

Use Varieties to Space Out Harvest Season

- Candor
- Clayton
- Redhaven
- Monroe
- Norman
- Winblo
- Biscoe
- Carolina Belle
- Ellerbe
- Elberta

See Growing Peaches in NC for more information on varieties:
http://www.ces.ncsu.edu/depts/hort/hil/ag30.html
Peach Rootstocks

All peaches are grafted – these rootstocks reduce Peach Tree Short Life Syndrome – major problem with peaches, caused by nematodes

- Lovell
- Halford
- Nemaguard
- **Guardian** - Best for nematode resistance
Peaches and Nectarines

- Spacing 12’ to 24’ apart
- Plant all grafted fruit trees with graft union above soil level
- Dig adequate hole
- Prune long roots at planting (if bare root)
Training and Pruning Peaches

- Open Center or Vase
- Cut out central leader when first planted - allow 4-5 main scaffold branches to grow
- Remove vigorous shoots in winter
Peaches and Nectarines

Problems – Many!

- Scale and aphids – dormant oil in winter
- **Fruit rot diseases** – regular spray program over entire season
- See Disease and Insect Management in the Home Orchard:
  [http://www.ces.ncsu.edu/depts/pps/notes/Fruit/fdin002/fdin002.htm](http://www.ces.ncsu.edu/depts/pps/notes/Fruit/fdin002/fdin002.htm)
Learn More

- Links to Extension fact sheets and publications on all fruits discussed at:
  - http://pender.ces.ncsu.edu/content/Fruit

- Sign up for weekly **Pender Gardener** emails!
Master Gardener Plant Clinics

Ask questions, bring samples for id, pick up information

- **Poplar Grove Farmer’s Market**, 2nd Wed of each month, April – October (9am – 1pm) – Opens April 7!

- **Hampstead Library**, 3rd Monday of each month, April - October (9am – Noon).
Master Gardener Plant Sale

April 16 & 17
- Fri: 9am - 5pm, Sat: 9am – 4pm
- Extension Office, Burgaw

Free classes Saturday
- 10am – Growing Vegetables
- 1:30pm – Growing Fruit

Many plants available including vegetables, blueberries, flowers, herbs . . . .

Information booth with lots of great resources and advice!
Questions?

- **Pender County Cooperative Extension**
  - 801 South Walker St., Burgaw
  - Open 8am – 5pm, Mon – Fri
  - 910-259-1235
  - [http://pender.ces.ncsu.edu](http://pender.ces.ncsu.edu)