Tree Pruning 101

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Pruning

- Why
- When
- How
- With what
- What happens if we don’t follow the rules?
Why Prune?

- Safety
- Health/form
- Appearance
- Production
- Over pruned tree:
- No lower branches
- No stem taper
- Slower growth
When to prune trees

- Best is late dormant season (Dec, Jan, Feb)
- Summer pruning for bleeders (late Aug, Sept, Oct.) (maple, birch, walnut etc.)
- Avoid spring growth period
- Avoid leaf color change
  - Nutrient retranslocation
When to prune shrubs and fruit trees

• Shrubs without showy flowers
  – Late winter / early spring before buds expand

• Shrubs with showy flowers
  – Immediately after bloom

• Fruit trees
  – Late winter / early spring before buds expand
Oaks are Special
Red more than White

Do not prune from March 1<sup>st</sup> to Oct 15<sup>th</sup> * to minimize oak wilt transmission
Browning starts at the margin, progresses towards the petiole, and trees defoliate.

Red Oaks

Red Oak Leaf

Fall-like appearance

White Oak Leaf

White Oaks
Two Rules of Pruning

1. Correct multiple leaders as soon as possible
2. Leave branches on until 1” caliper; remove before 2”
Don’t get Lazy!!!

Branch bark ridge

Branch collar
Target pruning for tree health

1st = undercut

2nd = removal

3rd = stub removed

Branch Bark ridge

Branch collar
April 13\textsuperscript{th} 2013
1yr, 3 weeks
July 26th 2013
1yr 22 weeks
Sept 23rd 2013
1yr 31 weeks
May 12th 2014
2yrs 12 weeks
June 20\textsuperscript{th} 2014
2yrs 17 weeks
July 7\textsuperscript{th} 2014

2yrs 20 weeks
March 13th 2015
3yrs 3 weeks
September 25 2015
3yrs 27 weeks
October 20 2015
3yrs  30.5weeks
August 17 2016
4yrs 25 weeks
Correct
SA = 0.64 sq. inch

Flush Cut
SA = 1.43 sq. inch

Pruned on 2/23/2016
WOUND DRESSINGS

Orange Shellac
Asphalt Paints
Creosote Paints
Tar
Epoxy
Liquid Electrical Tape
...
...
Topping - Young
• Wound closure problems
• Decay
• Weak branch attachment
Fruit Tree Pruning - Apples

Managing Light Availability

Old style - one base breaks into 3 or 4 lateral trunks at 3’ above the ground
New style - one main stem with scaffold branches
  Dwarf and some semi dwarfs designed for trellis systems
  Semi dwarf to full standards are self supporting
Pruning Apple Trees in a nutshell

What to remove on a previously pruned tree – Old Style
1. Water sprouts
2. Branches that go straight up or down
3. Branches that are crossing/rubbing on other branches
4. Branches directly above/below other branches
   2-3 feet spacing above/below
5. No more than 30-40% removed in any one year

What to remove on a previously pruned tree – New Style
1. Water sprouts
2. Branches that go straight up or down
3. Branches that are crossing/rubbing
4. Branches directly above/below other branches
   that are not spaced at least 2-3 feet above/below
Fruit Tree Pruning - Pears

Managing Light Availability

1st rule – Pears do not understand what you are trying to make them do

2nd rule – Pears will grow up at all cost

3rd rule – Pears would rather give up and die than conform to your will
Fruit Tree Pruning - Peaches

Managing Light Availability

- Peaches have strong apical dominance

- Peaches have weak wood

- Prune to hollow the venter and create a vase shape

- Prune new wood back 30-50% to limit fruit production and breakdown
4-5 branches low

Minimize vertical branching

Reduce all new growth back 30-50 %
Pruning Overgrown Shrubs

**Step 1** - Gas up the saw and wait for spouse to leave!

**Step 2** - Working quickly but safely cut as close to the ground as possible and removal all debris. **If step 2 is done correctly you will be at the store buying a new saw chain when spouse returns home – enter home carefully.**

**Step 3** - Wait! Coppiced shrubs will resprout from the root collar.
Shrub Maintenance

• Regular pruning cycle for most shrubs
  – 5 year removal of old wood shoots
  – Renewed sprouts flower and fruit more
  – Control height and vigor
  – Less disease problems when pruned
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Upcoming Field Days

Program Schedules

133 Tri-State Forest Stewardship Conference Talks Available Here (2009-2015)

Looking for a Certified Applicator to Treat for (Emerald Ash Borer)
- Read this short article
- Then follow this link to find or verify an applicator

2015 AgroForestry Conference Presentations Now Available as PDF’s and recordings!