Pruning

ISA Study Session
North Dakota Urban & Community Forestry Association
(NDUCFA)
Initial Thoughts

- Pruning is a wound.
- Trees grow differently in forests vs. planned landscapes.
- Standards are in place.
- Pruning is an art and a science.
- Every tree is different.
Why do we prune?

- Most often for “people” reasons...
  - Clearance
  - Aesthetics
  - Maintain safety
  - Develop strong central leader
  - Enhance vigor
  - Increase light penetration
  - Provide a view

- American National Standards Institute
  - A300 standards – pruning
  - www.ansi.org
Timing

- Ideal vs. Realistic
- Generally... late spring, before bud break
  - Species dependent... Oak Wilt, DED
  - Flowering – on new years growth or on last years.
  - Young
  - Or actively growing

- “Bleeding”
  - Is it bad?
  - Primarily maple’s, birch as well
Pruning Cuts

- Clean, sharp tools
- No jagged edges
- No tears
- Smooth surface
- At the correct location
- Branch collar
- Branch bark ridge
More Terms...

- Branch protection zone
- Compartmentalization
- Lateral cut/reduction cut
- Subordinate
- Codominant
- Included bark
- Permanent branch
- Branch bark ridge
Structural Pruning – young trees

- Steps
  - Remove broken, dead, dying, or damaged branches.
  - Select and establish a dominant leader.
  - Select and establish the lowest permanent branch.
  - Select and establish scaffold branches.
  - Selection and subordination of temporary branches.

- Forest Tree vs. Landscape Tree
Pruning – mature trees

- Not as tolerant to pruning
- No more than \( \frac{1}{4} \) of the leaf bearing canopy
- Less reserves left for wound closure
- Usually dead branches or to address safety
- Crown cleaning
- Crown thinning
- Crown raising
- Crown reduction
- Vista pruning
- Utility pruning
- Topping or heading back
- Crown restoration
- Watersprouts
- Lions-tailing
Pruning Palms

- Basically... try not to prune at all
Specialty Pruning

- Espalier
- Pollarding
Pruning Tools

- Sharp
- Clean
- Anvil type tools = avoid; By-pass is preferred
- Appropriately sized
Plant Growth Regulators

- Increase or decrease
  - Normal growth
  - Flowering
  - Fruiting

- More common among Utility Arborists
  - Antigibberellins