

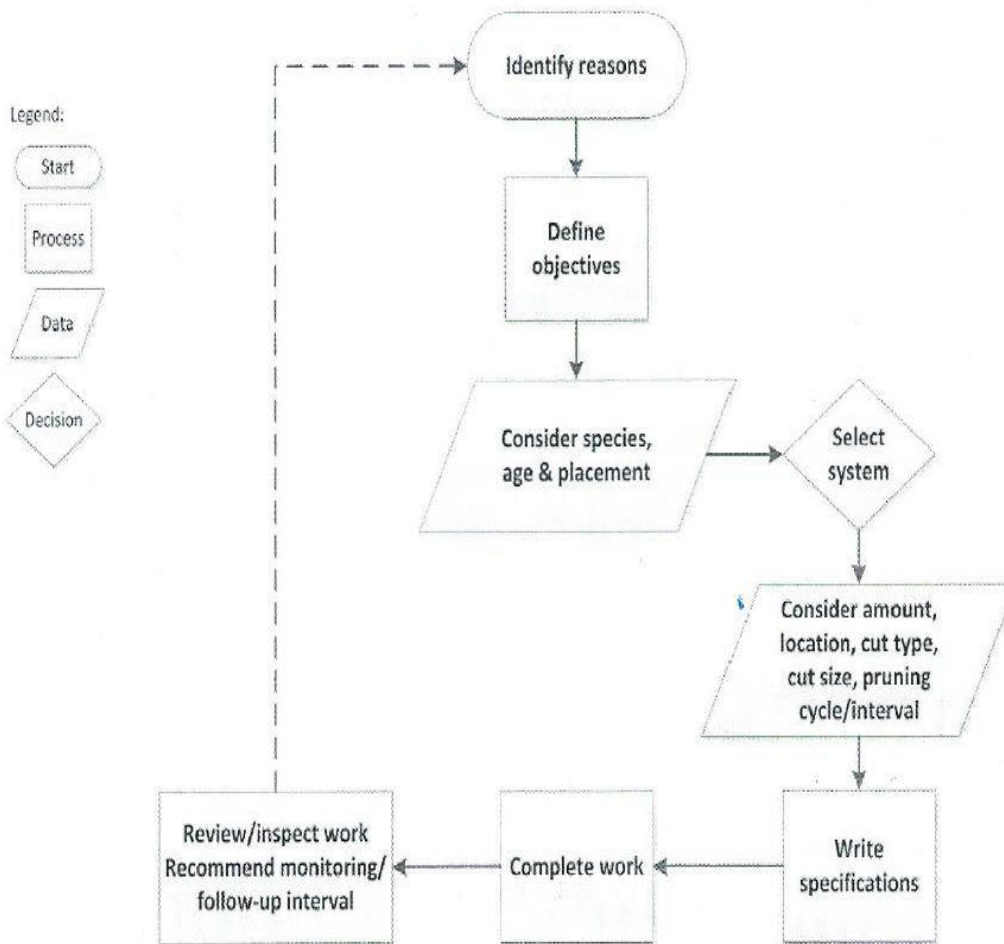
Pruning Trees and Woody Plants

- ANSI A300 (Part 1) 2017 Pruning – Intended for the development of work practices, written **specifications**, best practices, regulations and other measures of performance. Used to develop laws and regulations or work specifications not used for these things as a whole.
- ANSI A300 standards shall apply to any person or entity engaged in the management of trees, shrubs, palms or other woody plants including federal, state, or local agencies, utilities, **arborists**, consultants, arboricultural or landscaping firms, and managers or owners of property.
- Reasons to prune include reducing **risk**, improving or maintaining health, developing desired structure and appearance, preventing interference with the built environment, and other specific objectives.
- Pruning shall be performed only by arborists or other qualified professionals who, through related training and on-the-job experience, are familiar with the standards, practices, and hazards of **arboriculture** related to pruning and the equipment used in such operations.
- **Arboriculture**: The art, science technology, and business of commercial, public, and utility tree care.
- **Arborist**: An individual engaged in the profession of arboriculture who, through experience, education, and related training, possesses the competence to provide for or supervise the management of trees and other woody plants.
- **Pruning objectives**:
 - Improve **branch** and **trunk** architecture
 - Promote or subordinate certain leaders, **stems**, or branches
 - Promote desired branch spacing
 - Promote or discourage growth in a particular direction (**directional pruning**)
 - Minimize future interference with traffic, lines of sight, infrastructure, or other plants
 - Restore plants following damage; and/or rejuvenate shrubs
- **Provide clearance**:
 - Ensure safe and reliable **utility** service
 - Raise crowns for the movement of traffic or light penetration
 - Manage size and shape
 - Improve aesthetics
 - Manage production of fruit, flowers or other products
 - Manage wildlife habitat
- **Pruning systems**:
 - Natural – Allows for changes in appearance resulting from pruning when achieving specific goals such as:
 - Crown or branch **reduction**
 - **Raising** crowns
 - Developing or improving structure
 - Providing clearance
 - Improving tree health
 - Risk reduction
 - Enhancing views
 - Pollarding – A pruning system that maintains crown size by initial heading of branches on young trees followed by removal of shoots to their point of origin each year without disturbing the resulting pollard head.
 - Topiary – Pruning system that uses a combination of pruning, supporting, and training branches to orient a plant into a desired shape.

- Pleaching – Trains one or more plant to achieve a desired shape or form through a combination of pruning and interweaving or tying small branches to one another, or to a preformed frame.
- **Pruning specifications:**
 - Physical location of the plants to be pruned
 - Pruning objectives
 - Pruning system
 - **Pruning amount**
 - Pruning cut types
 - Size range
 - Plan for debris removal or repurposing
 - Time line for completion
- **Pruning cuts:**
 - The smallest diameter cut that meets the objective should be preferred
 - The number and size of cuts that expose heartwood should be minimized
 - Pre-cut branches when necessary to avoid splitting wood or tearing the bark
 - When removing a branch with included bark, the cut should be made as close as possible to the point where the wood of the stems join without damaging the remaining stem
 - When removing a dead branch or stem the final cut shall be made just outside the collar of living tissue without leaving a dead **stub** and the final cut should leave adjacent bark firmly attached
 - Interior and lower branches should be retained when compatible with objectives and system used
 - When removing live branches the majority of cuts should be in the outer portion of the crown
 - A **flush-cut** is not an acceptable pruning practice
- **Branch removal cut** – A pruning cut that removes the smaller of two branches at a union, or at the parent stem without cutting into the branch bark ridge or branch collar, or leaving a stub
- **Heading cut** – A pruning cut that removes a branch or stem between nodes (leaving a stub), to a bud, or to a live branch that is less than 1/3 the diameter of the branch or stem being removed
- **Shearing cut** – Cutting leaves, shoots, or branches to a desired plane, shape, or form
- **Topping** – Reduction of tree size by cutting to stubs without regard for long-term tree health **shall** be considered an unacceptable practice
- **Lion tailing** – When pruning trees using the natural system the removal of interior lateral branches that results in the concentration of growth at branch ends **shall** be considered an unacceptable practice
- **Find an arborist** – <http://treesaregood.org>

Fig. 4
Pruning process flowchart

Pruning Process Flowchart



David S Vandergriff, Extension Agent III & Adjunct Assistant Professor
 Board Certified Master Arborist SO-0846B
 Certified Professional Horticulturist #4325
 Tree Risk Assessment Qualified
 400 W Main Street, Suite 560
 Knoxville, TN 37902
dgriff@tennessee.edu
<http://twitter.com/DSVandergriff>
 (865)215-2340-office (865)215-2933-fax (865)705-4983 mobile