Quick and Dirty Pruning – The Basics

Created by the Grand Junction District
For more information contact us at 970-248-7325
• The following pruning information and instructions are designed for small to medium sized pruning jobs

• If the work is off the ground, if a chainsaw is needed, or for tree removal: the work should be done by a ISA Certified Arborist *with insurance*
Pruning Tools

Do not leave the ground - leave that to the professionals

Image source: pruningsaws.info
Pruning Tools

Bypass pruners are superior to anvil pruners

Image source: farmerfredrant.blogspot.com
The collar is formed by overlapping branch and trunk tissue which makes the branch union very strong. It connects a branch to its parent branch or to the trunk.
Bark that has been pushed up into a ridge as the branch and trunk grow. It indicates a strong branch attachment. It is not visible on all tree species.
Using Hand Pruners
branch diameter is less than 1 inch

Do not cut into the branch collar or bark ridge. No flush cut.
Place pruning blade against stem of branch for proper cut.
Three Step Process – branch diameter is greater than one inch

- Three Step Process prevents the weight of the branch from tearing any bark off the trunk
- First Cut – ¼ to 1/3 through underside of branch
- Second Cut – Above first cut and all the way through branch. This cut will leave a stub.
- Third Cut – Remove remaining stub. Do not cut into the branch collar or branch bark ridge. Double-sided arrow indicates length of stub

Image source: extension.missouri.edu
Three Step Pruning Process


Not always a defined collar, look for swell or branch bark ridge
Three Step Pruning Process

1. Cut UP
2. Cut DOWN
3. Cut OFF (remove stub)
Three Step Pruning Process

1. Cut UP  
2. Cut DOWN  
3. Cut OFF (remove stub)
Do not violate the three step process for Large Branches

- If **not** followed, the weight of the branch will tear the bark off the tree resulting in a larger wound

- The first step in the three step process is the undercut and it will prevent this from occurring
Callus Wood

Circular callus wood indicates good wound closure

Oval callus wood indicates the cut was made too close to the trunk = flush cut
What Not To Do
Flush Cutting

- Inside the collar is a unique barrier: **Branch Protection Zone**
- This zone has chemical and physical properties that slow or stop the spread of decay into the trunk
- Flush cutting removes this protection zone and allows decay inside the tree

Image source: Joseph O'Brien, USDA Forest Service, Bugwood.org
Flush Cutting
- Do not cut into the collar

Image source: treeworld.info
Trees react poorly to injuries such as flush cuts or torn branches.
Pruning Stubs

Branch stubs are a great place for insects and diseases to attack and damage the tree.
Watersprouts

This tree reacted to being topped by producing water sprouts.
Topping trees promotes bad branch structure and allows decay into the wounds.
Safety First

Never, ever use a branch. He needs to hire a professional.

Image source: coldclimategardening.com
Favorite Websites

Special Thanks to Vince Urbina for his pictures and information.

- **Dr. Ed Gillman**
  - [http://hort.ifas.ufl.edu/woody/](http://hort.ifas.ufl.edu/woody/)

- **OSU Landscape Plants**
  - [http://oregonstate.edu/dept/ldplants/](http://oregonstate.edu/dept/ldplants/)

- **Tree Browser from Utah State University – Extension Forestry**
  - [http://treebrowser.org](http://treebrowser.org)

- **Colorado State Extention**
  - [www.ext.colostate.edu/](http://www.ext.colostate.edu/)

- **Colorado Tree Coalition**
  - [www.coloradotrees.org](http://www.coloradotrees.org)