



# **Crosscut Saw Specific Training**

#### Link: Skip to Chainsaw Specific Training



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**March 2020** 



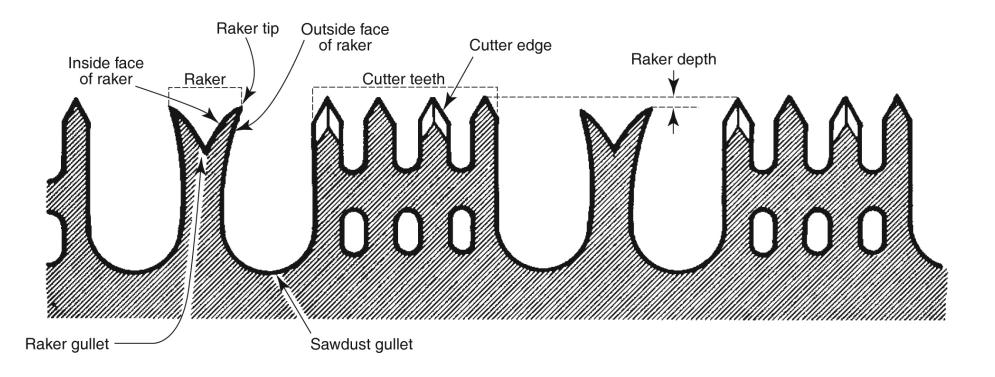
### **Crosscut Saw Training Overview**

- Anatomy of the crosscut saw
- How the crosscut saw works
- Tools and equipment
- Crosscut saw operation
- Wedging
- Underbucking
- Transportation and storage





#### **Crosscut Saw Parts**

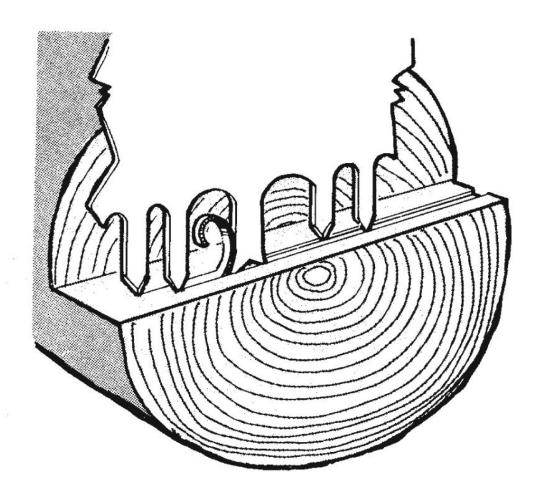








### The Kerf



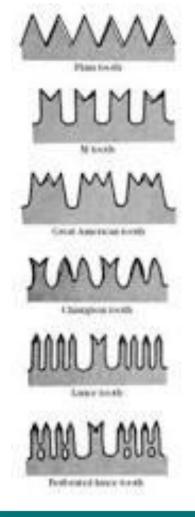
- Two cutters score each side of the kerf
- Rakers peel out the middle
- The set of the cutters makes the kerf wider than the saw blade







### **Crosscut Saw Tooth Patterns**



**Plain Tooth** 

**M** Tooth

**Great American Tooth** 

**Champion Tooth** 

Lance Tooth

**Perforated Lance Tooth** 



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# **Tools: Required**

- PPE
- First aid kit
- Emergency Communication Device
- Crosscut saw(s) + handle(s) + sheath(s)
- Single-bit, straight-handled axe + sheath
- Crosscut bucking wedges
- Solvent/lubricant
- Pruning saw + sheath
- Flagging





#### **Personal Protective Equipment (PPE)**

**Crosscut** (All equipment must meet USFS standards)

Hard Hat	Full brim or cap style
Eye Protection	Safety glasses or shield when chopping or driving wedges (ANSI z87.1)
Hearing Protection	Not Required
Long-sleeve Shirt	Required
Gloves	Slip-resistant, appropriate for the weather Cut-resistant, when filing & handling saw conditions
Trousers	Loose fitting
Boots	Heavy-duty, cut resistant or leather, laced, with non-skid soles and adequate ankle support
First Aid	OSHA-compliant kit, one with each saw crew





### **Tools: Recommended**

- Small shovel or combi-tool
- Underbucker
- Loppers
- Clippers
- File, hone
- Bark spud + sheath
- Solvent (Bio-diesel or orange based solvent)







# **Tools: Project Dependent**

- Pulaski
- Peavey, cant hook
- Log carrier
- Double-bit axe + sheath
- Basic rigging: strap, rope, come-along





### **Saw Handles**

#### Placement:

- Ensure all hardware is secure and properly installed
- Use the appropriate hole on side of saw blade
- Keep hand on top side of handle for increased power
- Flip handle when underbucking to gain clearance

#### Removal:

- Remove offside handle to finish single bucking
- Keep handle and hardware together



### **Stance & Body Position**

- Use a wide, athletic stance adjacent to the end of the saw
- Front foot slightly angled towards the log
- Distance from the log will vary on saw size, diameter of log and natural restrictions
- Arms should always be bent a few degrees









### **Stance & Body Position**

- Keep center of gravity moving back and forth, using your legs and body
- Front leg is bent, and back leg is straight at the end of the "push" motion
- Front leg is straight and back leg is bent at the end of the pull motion





# **Starting the Cut**

- Begin with gentle, straight, consistent motions
- Use the smaller "starter" teeth when appropriate
- For two-person sawing, use the "air sawing" technique to find coordination and rhythm as the saw drops into the wood
- As the kerf becomes deeper, more aggressive cutting may be used





#### **Crosscut Saw Operation Video**





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#### **Crosscut Saw Operation Video**









# Wedging



Wedge as soon as the saw is fully in the log







# Wedging



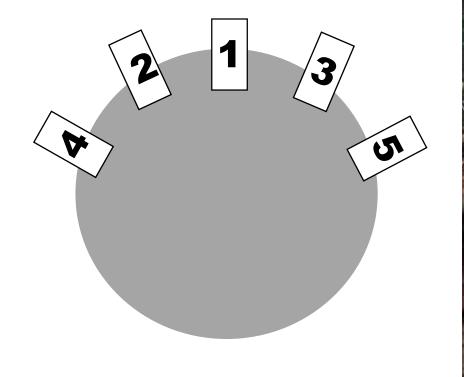
Use wedges to turn a top bind into a bottom bind







#### Wedge Placement











# Underbucking









#### Underbucking







Drive underbucker into wood, using axe. Set underbucker in line with intended kerf. Keep hand behind the pulley for added protection.



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Saw pivots on underbucker, so downforce at the handle, translates into contact pressure as the saw teeth cut into the wood. This can be an awkward movement, easier to accomplish on the pull stroke (blue arrows) and more difficult skill to acquire on the push stroke (yellow arrows).



# **Transportation & Storage**

- Always use cut-resistant gloves during handling and transport
- Avoid bending saws, especially modern saws
- Always cover saw with sheath during transport
- Use a rigid-style sheath for easier transport
- Avoid placing heavy tools on top of saws when in the bed of a truck



# **Transportation & Storage**

- Remove one or both handles when hiking
- In the field, store saws sheathed in a safe location with the teeth out of the dirt and debris
- Do not lean saws vertically
- For long-term storage, remove handles and hang from pin holes in a safe location
- Keep handles and hardware with saw







#### Pacific Crest Trail Association





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