

# Crosscut Saw Operations - bucking, limbing & felling

R6-FS-6700-7 (08/12)

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Crosscut Saw Operations - bucking, limbing & felling	2. LOCATION USFS - Forest Wide	3. UNIT Region 6			
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	4. NAME OF ANALYST Back Country Horsemen of Washington	5. JOB TITLE BCHW Safety Committee		6. DATE PREPARED April 2020		
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE		10. POST ABATEMENT ACTION RISK RATING (Severity/Probability Matrix)		
				Severity	Probability	Risk Code
General Crosscut Saw Operation	Serious potential injury during crosscut saw operation to sawyer(s), crew members or public trail users	Maintain Required Qualifications: Crosscut saw operation certification in accordance with FSM 2358 Must operate within the limits of certification First aid / CPR certification		III - Marginal	D - Seldom	4 - Low
Personal Protective Equipment (PPE)	Serious potential personal injury from falling limbs, flying debris, or sharp tools	Operators are responsible for having proper PPEs: Hard hat, eye protection, gloves, long sleeve shirt, long pants, and boots Boots must be leather or cut-resistant, with non-skid soles and have ankle support See PPE FSH 6709.11,21,13 First aid kit located on the jobsite OSHA standard 1910.266 App. A.		III - Marginal	D - Seldom	4 - Low
Tailgate Safety Meeting	Communication between Trail Work Leader and crew members is important to avoid injuries	Trail Work Leader and crew members must participate in a Tailgate Safety Briefing at the start of the project. See Tailgate Safety Guide Crew members MUST fill out a Medical Declaration Form Discuss communication procedures Discuss Emergency Action Plan (EAP) Discuss tasks and procedures for the project Sawyers MUST NOT work alone		IV - Negligible	E - Unlikely	4 - Low
Travel to worksite	Potential personal injury during transport of sharp crosscut saw(s) and trail tools	Use covering sheath for crosscut blade Use tool guards for trail tools Use proper transport for saws and tools carried on trail stock Foot traffic must travel 10 feet apart. Carry crosscut saw with teeth facing outward from your body		III - Marginal	D - Seldom	4 - Low

		Remove rear handle of saw when walking to worksite			
Equipment	Potential personal injury with improper use of sharp crosscut saw(s) and trail tools Cuts and lacerations	Follow safety, operation and maintenance recommendations for crosscut saws Have on hand an axe, wedges, maul, or single bit axe When not cutting always have the crosscut teeth protected and away from workforce	I V - Negligible	D - Seldom	4 - Low
Worksite	Potential worksite injuries must be discussed between Trail Work Leader and trail crew before project starts Overhead hazards Down logs in escape route Brush and limbs in worksite Log movement during cutting Slippery and uneven worksite	Make worksite hazard assesment prior to sawing. Check for overhead hazards and NEVER work under overhead hazards. Determine escape routes Clear area around work site of hazards Pay close attention to footing Pay close attention to log movement during cutting Post lookouts to alert trail users moving through the area	I V – Negligible	D - Seldom	4-Low
Worksite Safety	Potential worksite injuries must be discussed between Trail Work Leader and trail crew throughout the project Log movement during and after cutting Cut piece track after cutting  Potential personal injury from rain, snow and / or wind conditions	Space workers so the activities of one will not create a hazard Workers not essential for the project must keep outside the safety circle Except for sawyers have workers work on the same contour rather than some working above others  Do not saw in the dark or under hazardous weather conditions	I V - Negligible	D - Seldom	4 - Low
Crosscut Operation	Serious potential personnel injury during improper crosscut sawing techniques Binds trapping crosscut saw Log drop when cutting limbs Rolling log pieces Splintering saplings and limbs  Not notifying a NO-GO decission Hazardous trail conditions left for other trail users	Anticipate log tensions and compressions, then plan mitigation Use caution when cutting limbs supporting logs off the ground Use caution when sawing on the downhill side of a log especially a second sawyer on a crosscut saw. Do not saw logs on steep slopes with workers below Carefully relieve tension on saplings and limbs before cutting Asses all potential hazards using GO/NO-GO checklist Never leave a hazardous situation, such as a half cut or hung up log	I V – Negligible	C - Occasional	4 – Low

Cut Plan	Serious potential personnel injury during crosscut sawing from unplanned log movemnt	Mitigate cut sequence for potential binds based on bearing points and lie of log Determine mechanics of removing the cut pieces Execute cut plan Brief swampers Remove springpoles first Observe kerf closely to determine if behavior of log corresponds to perdicted bind Insert wedges on compression side as soon as possible When double-bucking, move second sawyer from offside for the release cut	I V – Negligible	D - Seldom	4 – Low
Communications	Critical information must be available for personnel in case of an injury  Delays in getting prompt medical aid for seriously injured	Trail Work Leader must have a Trailhead Communication Plan (TCP) and an Emegancy Action Plan (EAP) for the trail crew. Communication equipment as specified in TCP If trail crew divides into multiple teams, a copy of the TCP and EAP must accompany each team. Two-way radios and / or mobile phones for communication between sperate teams Check in and check out before and after project in accordance with TCP If an EAP is acctivated contact BCHW and land management agency	I I I - Marginal	D - Seldom	4 – Low
Felling Operations	Serious potential injury to sawyer(s), crew or public trail users  Struck by snags, down trees, widow makers  Rot on the stump affecting holding wood  Tripping/struck due to poor escape route	SIZE UP (Situational Awareness) From a short distance, walking 360 degrees around tree, look up for widow makers, conk, slipping bark. Don't move from the escape route towards the felled tree until all movement has stopped. Detect solid or sponge wood by "sounding" with falling axe.  Always look for and clear out escape routes 45 degrees away from tree. Walk out both the escape route and where the tree is to be felled looking for such hazards as snags, down logs, jill pokes, rocks, stumps, hang ups and low hanging limbs  Conduct OHLEC process.	I - Catastro- phic	D - Seldom	2 - High

<p>Securing Felling Area</p>	<p>Serious potential injury to sawyer(s), crew or public trail users</p> <p>Potential fatal injury to sawyer(s). crew or public trail users</p>	<p>The faller has the responsibility and authority to identify, secure, and manage the felling area.</p> <p>A MINIMUM OF 2-1/2 TIMES THE HEIGHT OF MATERIAL BEING FELLED IN ALL DIRECTIONS MUST BE SECURED.</p> <p>No one shall be allowed in the secured felling area without the authorization of the faller</p> <p>In addition on the entire downhill side will be included in the secure area on hillsides with steep slopes where material can roll for long and unpredictable distances</p> <p>A safety zone will be established outside the secured area and everyone must remain there until all felling is completed and the "all clear" has been given by the faller</p> <p>One person shall be appointed and responsible to maintain reliable communications with the faller and the crew members in the safety zone to ensure nobody enters the secured falling area</p> <p>A road or trail guard will be set up on all roads and trails entering and leaving the secured felling area</p> <p>Effective communications must exist between the guards and the faller</p> <p>Before leaving the felling area the faller needs to ensure that no hazards remain such as hang ups, unusable logs, or other dangers</p> <p>To protect the lives of employees, contractors, and the public it is the responsibility of the faller to see that these standards are firmly adhered to</p> <p>It is the responsibility of the supervisors and all employees engaged in chainsaw operations to understand and follow these established standards</p>	<p>1 – Catastro- phic</p>	<p>D – Seldom</p>	<p>2 – High</p>

Felling Cut	<p>Serious potential injury to sawyer(s), crew or public trail users</p> <p>Serious fatal injury to sawyer(s), crew or public trail users</p>	<p>Make the horizontal cut of the face 1/3" the diameter of the stump</p> <p>Always match the sloping cut and horizontal cut together, use 2" stump shot (this means make the back cut 2" higher than the horizontal cut</p> <p>Look up as you make all cuts to tree</p> <p>Use a wedge on all back cuts unless the tree has a heavy lean, or the tree is too small to insert a wedge.</p> <p>Use adequate felling axe for felling</p> <p>Always look up after each time of wedge has been driven into tree</p> <p>Be aware of wind direction and speed</p> <p>Always leave a minimum of 2" of holding wood across the stump.(DEPENDING ON THE SIZE OF TREE BEING FELLED AND OR CONDITION OF TREE BEING FELLED)</p> <p>Do not cut corner wood</p> <p>Always give a warning shout before you start the back cut, NEVER BE AFRAID TO SAY NO</p>	I – Catastrophic	D – Seldom	2 – High
<b>10. LINE OFFICER SIGNATURE</b> BCHW Safety Committee		<b>11. TITLE</b> BCHW Safety Committee	<b>12. DATE</b> May 2020		

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