U.S. Department of Agriculture	1. WORK PROJECT/ACTIVITY	2. LOCATION	FS-6700-7 (2/98 3. UNIT
Forest Service	Chainsaw, Crosscut		
	& Handtool Use	Flathead National Forest	Spotted Bear R.D
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12	4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED
(Instructions on Reverse) 7. TASKS/PROCEDURES	Jim Flint 8. HAZARDS	DFMO 9. ABATEMENT ACTIO	2/24/2021
7. TASKS/PROCEDURES	0. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE	
Power Tool Use (Chainsaw) (22.48) (22.48c) Injury (22.48d) (22.48e) Injury		 Power tools will only be used by trained personnel over the age of 18 All sawyers are required to attend a saw training course before operating a chainsaw and are only allowed to saw within their individual rating qualifications The crew working with a chainsaw operator must never approach unannounced During Felling operations KEEP AT LEAST TWO-TREE LENGTHS BETWEEN YOU AND THE FELLER Keep a safe distance from an operating saw as it can throw materia nearly 25 feet Protective equipment must be worn at all times when operating a chainsaw (Hardhat, goggles and/or face shield, hearing protection, chaps, 8" high boots, a long sleeve shirt and gloves) Gloves must be worn when handling or performing maintenance on a chainsaw with an ungaurded chain. Operators must be aware of the presence and location of other personnel Lookouts may be posted when necessary to control the work area Not recommed to operate a chainsaw alone A ten person first aid kit is required to be carried during all saw operations. Individual saw operators have the obligation to say "NO" and walk away from any situation they determine to be an unacceptable risk 	
Chainsaw Handling Techniques (22.48f)	Cuts	 Carry the chainsaw in a way to prevent comuffler, or bucking spikes When carrying a saw on your shoulder, tal sharpness of the chain and "dogs". Wear a and a shoulder pad. Cover the bar and chai guard is recommended Set the saw at idle speed and activate the a saw for short distances Shut off the saw when carrying it more that conditions, such as slippery surfaces, heavy streams 	ke extra care due to the long-sleeved shirt, gloves n. Use of a bar and chain chain brake when carring n 50 feet, or in hazardous
Starting/Operating Chainsaws (22.48f)	Cuts	 Maintain a secure grip on the saw at all tin sawing position wrapped around the handle Use proper starting procedures, Do Not "d Do not cut with powerhead above shoulde 	rop start"

		- Always use both hands when operating the saw
Fueling Chainsaws (22.48f)	Burns	 Allow the saw to cool before refueling Fill the tank on bare ground or other noncombustible surface Refuel outdoors and at least 20 feet from an open flame or other sources of ignition Start the saw at least 10 feet from the fueling area
	Kickback	 All chain saws must have a chain break Maintain proper grip and body position Check for anything that may interfere with saw while cutting
	Felling	 Clear work area and escape route Adhere to proper felling techniques Maintain control of felling area Visually check top of tree for overhead dangers (Widowmakers)
	Weather	- Do not fell trees if the wind is strong or changing directions - Wear proper clothing
Hand Tool Use (41.13) (41.21)	Cuts	 Prior to use, inspect hand tools for loose heads and split, cracked, checked or warped handles. Do not use tools with these defects. Separate and flag for repair all damaged or unsafe tools For all chopping and digging tool use wear proper clothing: long pants, boots, long sleeve shirt, gloves, eye protection Chop with both feet on the same side of the tree, standing on top of the tree is not reccommended When limbing on the side you are standing do not allow the handle to rotate past parallel to the ground, chop limbs on opposite side of tree if possible Do not allow two people to chop together on the same tree Check for and remove all overhead obstructions prior to swinging a hand tool If the cutting edge picks up a wood chip, stop, remove the chip before continuing Be aware of foot position Maintain a firm grip on hand tools to prevent loss of control in the event of a glancing blow Keep tools sharp to help prevent bounce backs When a tool is not in use, shield any sharp edges and place the tool in a safe location
		 Maintain safe working seperation, at least 10 feet apart Do not carry chopping tools on your shoulder Carry the tool on the downhill side so that it can be more easily discarded in case of a fall,

		 Do not throw tools as this may damage the tool causing failure and injury during subsequent use. When transporting tools to and from the job site, ensure that sharp edges are guarded Never transport loose tools inside the same compartment with employees unless the vehicle is equipped with a protective screen, net, or secured toolbox
Tool Maintenance (41.21)	Sharp edges	 Wear gloves and use controlled strokes when sharpening Firmly secure tool when sharpening When filing, use a file equipped with a handle and guard Use sharp files, discard dull files When grinding, grind slowly away from the cutting edge, avoid overheating the metal Do not sharpen tools with power grinder without eye and ear protection and leather gloves and apron
Crosscut Saw Use (22.48h)	Cuts	 Think before you cut Keep sheath on saw when not in use Eliminate obstacles in work area Pick up the saw with teeth away from your body When attaching handles, keep the teeth away from your body and secure a firm grip on the saw Maintain proper body position and ensure stable footing prior to beginning the cut Do not position your leg under the crosscut while sawing NEVER reach across a moving crosscut Ensure hands are in proper position on the crosscut handles Keep in communication with your partner at all times about holding wood, binds, limbs, and knots that might affect safety When using a two-person crosscut saw for bucking, ensure that any person placed downhill is in a safe position. If this is not possible single buck from the uphill side When using a two-person crosscut saw for falling, always predetermine who will remove the saw Use wedges to prevent saw from becoming pinched Keep teeth out of dirt and rocks to maintain sharpness When situations are deemed unsafe, use alternate methods or cancel the task
Crosscut Transport - personnel (22.48h)	Cuts	 Remove the rear handle when transporting a crosscut on your shoulder. If left on, the rear handle will catch on trees and branches. Balance the crosscut on your shoulder with the sheath on the crosscut and the teeth facing away from your neck Carry the saw on the downhill side Walk last in line if you are the person carrying the crosscut saw

		- DO NOT bend the cross cut around and lock the hand will break	dles – the saw
Transporting Crosscuts On Pack Animals (22.48h)	Stock Injury	 Select a reilable pack animal to carry a crosscut saw. Pack the crosscut over well matched loads Ensure the sheath adequately guards the saw Ensure the handles are firmly tightened in place Center the crosscut on the pack animal draped over b both handles to the packs and also tie the center of the the highest point on one of the packs Periodically check that the saw and loads are secure shifted It is recommended to have two people to load and united to the pack to the pack the pack to be provided to have two people to load and united to the pack to the pack to be people to load and united to the pack to the pack to be people to load and united to the pack to be pack to be people to load and united to the pack to be pack to be pack to be people to load and united to the pack to be people to load and united to the pack to be pac	crosscut to and have not
10. LINE OFFICER SIGNATURE		11. TITLE 12. DAT	E
		District Ranger	
Previous edition is obsolete	(over)	· · · · · · · · · · · · · · · · · · ·	J

JHA Instructions (References-FSH 6709.11 and .12)	Emergency Evacuation Instructions (Reference FSH 6709.11)
The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.	Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite. Be prepared to provide the following information:
 Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory. Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP). Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example: a. Research past accidents/incidents b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature. c. Discuss the work project/activity with participants d. Observe the work project/activity e. A combination of the above 	 a. Nature of the accident or injury (avoid using victim's name). b. Type of assistance needed, if any (ground, air, or water evacuation) c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks. d. Radio frequency(s). e. Contact person. f. Local hazards to ground vehicles or aviation. g. Weather conditions (wind speed & direction, visibility, temp). h. Topography. i. Number of person(s) to be transported j. Estimated weight of passengers for air/water evacuation.
 Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method: a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and 	JHA and Emergency Evacuation Procedures Acknowledgment We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents: SIGNATURE DATE SIGNATURE DATE
 b. Substitution. For example, switching to high flash point, non-toxic solvents. c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices. d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills portable water pumps) e. A combination of the above. Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE. Blocks 11 and 12: Self-explanatory. 	Social OKE DATE Social OKE DATE Work Leader