

Appalachian National Scenic Trail		1. WORK PROJECT/ACTIVITY HAND TRAIL TOOL MAINTENANCE IN SHOP	2. LOCATION Trail Wide	Includes work performed on lands of National Park Service, and various states' park and lands
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 OSHA (Instructions on Reverse)		3. NAME(S) OF ANALYST(S) Keith Stegall	4. Work Supervisor Various	5. DATE PREPARED 05/31/2019
Required Standards and General Notes:	Knowledge of cutting tool edge angles. Appropriate sharpening and repair procedures			
Required Personal Protective Equipment	Gloves, long sleeves, Eye protection (certain tasks), Ear protection (certain tasks), dust protection (certain tasks)			
Tools and Equipment	Vise, files, grinder, sandpaper, first aid kit, fire extinguisher			
Available Training	Tool care & reconditioning; Crosscut Saw Sharpening; USFS Video: An Axe to Grind			
7. TASKS/PROCEDURES	8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE	9. ABATEMENT ACTIONS OR PROCEDURES Engineering Controls * Substitution * Administrative Controls * PPE		
Sharpening cutting edge of tools (using bastard mill file or grinder)	Cutting hands or arms with tool	<ul style="list-style-type: none"> ● Wear cut resistant or leather gloves and long sleeves. ● Use handle on file. 		
	Grinder throws sparks and metal filings	<ul style="list-style-type: none"> ● Wear eye and ear protection. ● Set up disk guard on grinder. ● Wear work apron. ● Know your facilities evacuation plan, including a meetup location. ● Ensure appropriate fire extinguisher is present, has been inspected, and is properly located. ● Ensure smoke detectors are in working condition. ● Ensure that the appropriate means of ingress/egress are available and sufficiently marked and lighted at all times. 		
	Tool moves during sharpening	<ul style="list-style-type: none"> ● Secure tool firmly held in vise or jig. 		
	Eye, back, or neck strain	<ul style="list-style-type: none"> ● Wear eye protection and/or face shield. ● Secure tool at a comfortable angle for sharpening. ● Ensure adequate lighting intensity and angle for observing sharpened edge. ● Consider stool and/or fatigue mat for work space 		
Rehandling tools	Injury from loose or suddenly dislodge tool head	<ul style="list-style-type: none"> ● Wear sturdy boots. ● Stay constantly aware of tool head stability. 		
	Crushed fingers	<ul style="list-style-type: none"> ● Keep fingers out of vise where they could be crushed. 		

	Smashed fingers or flying debris from setting wedge	<ul style="list-style-type: none"> ● Wear eye protection. ● Pay close attention to mallet or hammer swing.
	Cuts from wood rasp or hacksaw in shaping handle	<ul style="list-style-type: none"> ● Wear long-sleeves and leather gloves.
	Dust and noise from shaping/sanding handles or tool heads	<ul style="list-style-type: none"> ● Wear eye protection ● Wear appropriate dust mask ● Wear hearing protection
Reconditioning or marking handles	Combustion of linseed oil soaked rags	<ul style="list-style-type: none"> ● Secure rags in marked and appropriately rated metal airtight can after use. ● Empty can and properly dispose of rags regularly.
	Exposure to aerosol contents of spray paint; paint in eyes or on skin	<ul style="list-style-type: none"> ● Paint tools outside or in a well ventilated area. ● Wear eye protection. ● Wear appropriate gloves
Storing, cleaning, and testing tools and equipment	Injury from unsheathed tools	<ul style="list-style-type: none"> ● Ensure tools are stored with appropriate guards on sharp edges
	Injury from objects falling due to improper storage	<ul style="list-style-type: none"> ● Rather than store heavy or sharp objects in high places, store lighter equipment on upper shelves. ● Use appropriately rated step ladders to access overhead items.
	Injury from items stored carelessly	<ul style="list-style-type: none"> ● Store tools and equipment in balanced position where they are not precarious or prone to become imbalanced. ● When possible, store hand tools in racks with handle hanging down. ● Do not lean equipment against walls.
	Injury from slips, trips, falls	<ul style="list-style-type: none"> ● Keep floor clear of tools, waste, or materials. ● Clean up spills.
	Injury from use of faulty tool	<ul style="list-style-type: none"> ● Tag tools needing repair with a "DO NOT USE" tag. ● Store in a separate location if possible.
	Exposure to cleaning or conditioning chemicals	<ul style="list-style-type: none"> ● Refer to manufacturer's handling and storage instructions. ● Be aware chemicals can catch fire. ● Store flammable liquids in original containers or approved and well marked containers. ● Store containers in appropriately rated flammables cabinet. ● Ensure shop is equipped with appropriate type, size of fire extinguisher and that it is inspected annually by a competent person. ● Wear splash-proof eye protection and appropriate gloves when handling liquids.
	Injury from poorly maintained tool	<ul style="list-style-type: none"> ● Check on/off switch for proper function ● Perform maintenance at manufacturer's recommended intervals. ● Keep bits, files, and knives sharp.

- Do not modify tools.
- Ensure all manufacturer safety components of tool are in working condition.
- Tag-out tools not in safe working condition. Add to Lockout Tag-out program.

10. OFFICIAL SIGNATURE



Previous edition is obsolete

11. TITLE
Acting Chief Ranger
- Safety Officers

(over)

12. DATE

6/28/19