

# General Trail Maintenance


R8 ATC GV Attachment 2C, Page 1 of 4

<p><b>U.S. Department of Agriculture</b>  <b>Forest Service</b></p>	<p><b>1. WORK PROJECT/ACTIVITY</b> Volunteer Agreement 2016-GV-11083150-001,</p>	<p><b>2. LOCATION</b>  Appalachian Trail</p>	<p><b>3. UNIT</b>  R8</p>
<p><b>JOB HAZARD ANALYSIS (JHA)</b> References-FSH 6709.11 and -12 (Instructions on Reverse)</p>	<p><b>4. NAME OF ANALYST</b> Michelle Mitchell with input from Darryl Harley and Andrew Downs</p>	<p><b>5. JOB TITLE</b>  AT Liaison</p>	<p><b>6. DATE PREPARED</b>  4/27/12</p>
<p><b>7. TASKS/PROCEDURES</b></p>	<p><b>8. HAZARDS</b></p>	<p><b>9. ABATEMENT ACTIONS</b> Engineering Controls * Substitution * Administrative Controls * PPE</p>	
<p><b>Vehicle Operation</b></p>	<p>Fatigue Narrow, rough roads Poor visibility Mechanical failure Weather</p>	<p>Drive defensively and slowly; Always wear seatbelts and turn lights on; Ensure that you have reliable communication; Obey Forest road speed limits; Use spotter when backing; Use parking brake, and do not leave vehicle while it is running; Inform someone of your destination and estimated time of return; Call in if plans change; Carry extra food, water, and clothing; Stop and rest if fatigued; Refer to pages 20-72 in the Health &amp; Safety Code Handbook (H&amp;SC).</p>	
	<p>Getting Lost</p>	<p>Use map if possible; Drivers should know where the destination point is; Maintain visual contact with another vehicle;</p>	
<p><b>Hiking on the Trail</b></p>	<p>Dehydration Contaminated Water</p>	<p>Drink 1/2 – 1 quart of water per hour when the temperature is above 80 degrees. Increase fluids on hotter days or during extremely strenuous activity. Observe team members for signs of dehydration; Review map or ask crew leader about water sources, keeping in mind the seasonality of the water source. Use proper filtration techniques when drinking from a non-municipal water source.</p>	
	<p>Falling objects Snags Trail hazards Carrying tools</p>	<p>Be aware of your surroundings and watch where you step. Look for overhead dead limbs, overhead dead hung up limbs (widow makers), root sprung trees and snags; Be aware of and prepared for water crossings and marshes; When fording streams, use a walking stick for an extra point of contact to provide stability, and undo hip belt to avoid drowning; Maintain a safe walking distance between people (10 feet minimum); Always have sheaths on tools and carry them on the downhill side of the trail; The person carrying the crosscut saw, rock bar, or pole saw should walk last;</p>	
	<p>Weather</p>	<p>Know the weather forecasts; You can experience rain, hail, snow, lightning, extreme heat, and sudden drops in temperature on the AT; Be watchful throughout the day of changing weather; Take appropriate gear.</p>	

	Getting Lost	Identify safe routes and local conditions; Hike in a group; Make sure visual contact is kept at forks in the trail; If one has to depart from the trail, advise the crew. Avoid hiking in the dark; Designate a meeting spot should someone become separated
	Foot Damage	Wear appropriately sized hiking boots and socks; take into account the terrain, the work, and the weather; Communicate before moving heavy objects; Use comstarch as a drying agent on blisters.
	Sun Exposure	Wear protective clothing including long sleeve shirt, long pants, full brimmed hat/helmet; Use sun block and lip balm;
	Heavy Brush	Wear protective clothing such as long sleeve shirt, long pants, helmet, work gloves, and protective eye wear; Watch for others when discarding brush; Throw brush out of sight from the trail; In heavy undergrowth, lift knees high to clear obstacles.
<b>Working Outdoors</b>	Animals	Be observant of snakes which like to live under logs and shady areas; Be Bear Aware and use appropriate food storage devices
	Insects	Use insect repellent; Be aware of potential for hives in brush or hollow logs; Clothing should fit tight at the wrists, ankles and waist; Tuck in shirt tails; Search your body, especially hair and clothing, for ticks and insects on a regular basis; Bathe and/or change clothes after each work day;
	Contact with Ticks, Spiders, Mosquitoes, Bess, and Poison Oak/Oak/Sumac	Identify crewmembers that are allergic and keep them out of work locations where poisonous plants are present. Educate crewmembers on plant ID. Whenever the skin contacts a poisonous plant or noxious weed, wash the area with cold water within 1 to 3 minutes or as soon as possible. While working in the poisonous plant environment, do not use soap and/or hot water because they can remove the natural protective oils from your skin. Upon returning from the field, use rubbing alcohol to cleanse contacted skin. Wear gloves when pulling weeds.
	Hikers	Inform the others when you see hikers on the trail; Work stops until the hikers clear the work area; If a potential hazard exists, crew members can stand watch at safe distances and stop hikers until the hazard is cleared; Ensure hikers have a clear path; Place tools off the trail in a centralized location; Keep shields on sharp edges when tool is not in use; Communicate a clear path to the hikers;
	Stock – Applicable in only a few places	Inform everyone when stock approaches; Work stops until the stock has passed the work site; Stand off the trail on the downhill side; Place tools a safe distance away from the trail; Do not make sudden movements or loud noises; It may be helpful to take your hard hat off until animals pass; Listen and look for approaching stock; Remain calm and back away if animals become unruly;
	Sharp Tools	Carry tools safely as instructed by crew leader; Carry tools on the downhill side; Carry sharpened edge of tool downward away from your body; Be aware of others around you; Do not carry tools on your shoulder except rock bar pole saw or crosscut saw; Space yourselves when hiking;

	<p>Back Injury</p>	<p>Use proper lifting techniques when picking up items; Bend knees, not back; Lift straight; Stretch periodically; Work with a partner; Hydrate;</p>
	<p>Tool Use</p>	<p>Properly maintain and care for tools; Carry tool with scabbard on; Look around for others and hazards before swinging tools; Have firm footing and be balanced when swinging; Never throw a tool; When not in use, shield any sharp edges; Limb and peel logs on the opposite side of you; Keep tools sharp; Wear gloves, hard hat and boots; Move large rocks by hand or with a lever or bar versus hitting with a tool; Maintain tight grip on tool handles; Use gentle but deliberate hoeing action; Be aware of others working around you; Do not use tools with a loose handle; Avoid working in the dark;</p>
	<p>Hand and Foot Damage</p>	<p>Communicate when moving large or heavy objects; Do not roll anything heavy when people are downhill; Anticipate the roll of any loose object; watch for limb and stubs on rolling trees;</p>
	<p>Overhead hazards</p>	<p>Be watchful of loose limbs on trees; Be careful of dead trees; Avoid working at an unsafe site;</p>
<p><b>Working During Hunting Season</b></p>	<p>User conflicts, fire-arm safety</p>	<p>Wear Hunter's ORANGE vests during hunting seasons. Post signs near work sites to warn hunters of employee and crew locations. Reschedule jobs to work outside of hunting season dates, when possible.</p>
<p><b>Working on the Trail</b></p>	<p>Refer to ATC document "TRAIL MAINTENANCE AND CONSTRUCTION TASKS THEIR HAZARDS, AND RECOMMENDED SAFETY GEAR."</p> <p>OVERHEAD HAZARDS</p> <p>LOG WORK</p>	<p>Refer to ATC document "TRAIL MAINTENANCE AND CONSTRUCTION TASKS THEIR HAZARDS, AND RECOMMENDED SAFETY GEAR." For purposes of this JHA, the term "shin guard" contained within the ATC document means the equipment used by baseball catchers to protect their lower legs</p> <p>In addition where already identified and required by the ATC document, hardhats (helmets) are required for the following tasks: cutting brush and power mowing. Hardhats are also required in any situation where there has been a weather event that may have produced widow makers, hazard trees, and/or or blowdowns.</p> <p>In addition to the PPE and mitigations required by the ATC document, boots are required while performing log work activities. Also, slippery logs should be braced to avoid rolling or sliding downhill.</p>
<p><b>Communication</b></p>	<p>Phones</p>	<p>Be aware that cell phones do not work along many sections of the AT. Know the location of the nearest working landline and, if possible, to the nearest location for cell phone service. If available, carry a satellite phone.</p>
	<p>Radios</p>	<p>If available, the FS will provide a portable agency hand-held radio for work trips. Ensure radio has properly programmed frequencies, in working order, and has an extra set of batteries before leaving on the trip; Know usable</p>

		repeaters and best locations to use radios during emergency. Know who is available to hear you call on the radio, as FS staffing may be few or none after regular work hours and on weekends.
	Check-in/Check-out	Check-in before project and check-out after project with designated ATC and/or National Forest Representative.
Emergency Response	Emergency Response	Know the locations of the closest hospital and inform crew members prior to beginning work activity. Know the location of the closest road intersection or easily identifiable meeting point where an ambulance could be met and inform crew members prior to beginning work activity.
		Contact designated ATC and/or National Forest staff immediately AFTER calling 911 in an emergency situation

<p>10. LINE OFFICER SIGNATURE</p> 	<p>11. TITLE</p> <p>DRF</p>	<p>12. DATE</p> <p>3/11/16 ROJ 3/29/16</p>																
<p><b>JHA Instructions (References-FSH 6709.11 and .12)</b></p> <p>The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.</p> <p>Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.</p> <p>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).</p> <p>Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:</p> <ol style="list-style-type: none"> <li>Research past accidents/incidents.</li> <li>Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.</li> <li>Discuss the work project/activity with participants.</li> <li>Observe the work project/activity.</li> <li>A combination of the above.</li> </ol> <p>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:</p> <ol style="list-style-type: none"> <li>Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.</li> <li>Substitution. For example, switching to high flash point, non-toxic solvents.</li> <li>Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.</li> <li>PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, and portable water pumps).</li> <li>A combination of the above.</li> </ol> <p>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.</p> <p>Blocks 11 and 12: Self-explanatory.</p>		<p><b>Emergency Evacuation Instructions (Reference FSH 6709.11)</b></p> <p>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:</p> <p>Be prepared to provide the following information:</p> <ol style="list-style-type: none"> <li>Nature of the accident or injury (avoid using victim's name).</li> <li>Type of assistance needed, if any (ground, air, or water evacuation).</li> <li>Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.</li> <li>Radio frequencies.</li> <li>Contact person.</li> <li>Local hazards to ground vehicles or aviation.</li> <li>Weather conditions (wind speed &amp; direction, visibility, temperature).</li> <li>Topography.</li> <li>Number of individuals to be transported.</li> <li>Estimated weight of individuals for air/water evacuation.</li> </ol> <p>The items listed above serve only as guidelines for the development of emergency evacuation procedures.</p> <p><b>JHA and Emergency Evacuation Procedures Acknowledgment</b></p> <p>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:</p> <table border="0"> <tr> <td>SIGNATURE</td> <td>DATE</td> <td>SIGNATURE</td> <td>DATE</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>	SIGNATURE	DATE	SIGNATURE	DATE	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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