

<b>Appalachian National Scenic Trail</b>	1. WORK PROJECT/ACTIVITY  <b>Boundary Monitoring &amp; Maintenance</b>	2. LOCATION  <b>Trail Wide</b>	Includes work performed on lands of National Park Service and various states' park and lands
JOB HAZARD ANALYSIS (JHA). References: FHS 5709.11 and -12,  OSHA  (Instructions on Reverse)	3. NAME(S) OF ANALYST(S)  <b>Keith Stegall</b>	4. WORK SUPERVISOR  <b>Various</b>	5. DATE PREPARED  <b>02/11/2025</b>
Required Standards and General Notes:	Volunteers should have access to the latest version of survey and segment maps, as well as all monument witness tree diagrams and ArcGIS support. Volunteers should dress so that they are readily visible and identifiable as Appalachian Trail affiliates.		
Personal Protective Equipment	Work gloves, long pants, sturdy boots for hiking off-trail. Hi-visibility vest or other clothing, identifying participants as AT boundary and corridor lands monitors. Recommended PPE: long sleeves, eye protection, and hardhat		
Tools and Equipment	Examples include: First aid kit, maps, cell phone/ Satellite Communication device, handsaws, hand pruners, loppers, paint, paint brushes, wire brushes, /boundary easement signs, hammer, nails, washers, compasses, 50' tape measure, trowel/digging tool, flagging tape. Business cards, if available. 'Field Maps' app with the needed data downloaded for the work location, and/or necessary printed maps.		
Available Training	Corridor Monitor Training and Handbook; Other JHAs related to Boundary maintenance activities: Fundamentals: Activities in the Field JHA, Tick Exposure JHA; Trail Work with Hand Tools JHA; Making Public Contact JHA; Working with Paints, Stains, & Solvents JHA.		
<b>7. TASKS/PROCEDURES</b>	<b>8. HAZARDS, POTENTIAL HAZARDS/INJURY SOURCE</b>	<b>9. ABATEMENT ACTIONS OR PROCEDURES</b>  Engineering Controls * Substitution * Administrative Controls* PPE	
<b>PRE-TRIP PLANNING</b>	Lack of Knowledge/Training	<ul style="list-style-type: none"> <li>● Review all relevant/related job JHAs.</li> <li>● Assemble relevant maps--review deed language for any non-fee lands.</li> <li>● Review notes/reports from previous visits, if any.</li> <li>● Identify and discuss with participants in advance the area of work, expected terrain and ground conditions, and context related to neighbors.</li> <li>● Plan access points/parking, alternative exit options, review with participants prior to beginning work .</li> </ul>	
	Defective and/ or Unlabeled Tools and/or Equipment	<ul style="list-style-type: none"> <li>● Ensure all tools are in proper working condition.</li> <li>● If a tool is found to be defective, remove the tool from inventory and mark it as broken.</li> </ul>	
	Interactions with other land owners.	<ul style="list-style-type: none"> <li>● Refer to deeds and maps for specific details to prepare and seek permission, if necessary.</li> <li>● Seek advanced permission for monitoring non-Fee lands (easements), contact landowner in advance--see deed for specific details.</li> </ul>	
Working Off Trail	Getting lost	<ul style="list-style-type: none"> <li>● Bring a map, compass and GPS with extra batteries and know how to use them. Designate a leader and a sweep when hiking in groups.</li> <li>● Always use the buddy system. If any crew member needs to leave the field early, they are accompanied by a partner.</li> <li>● Periodically take time to orient your location related to known landmarks.</li> </ul>	

	Emergency Response Plan	<ul style="list-style-type: none"> <li>● Ensure all members of the group are aware of actions to be taken in the event of an emergency. Items such as evacuation routes, closest hospitals, check-in/check-out and cell signal status should be discussed with members of the work party prior to leaving the vehicle.</li> </ul>
	Injury in a remote or unknown location	<ul style="list-style-type: none"> <li>● Do not monitor or maintain boundaries alone.</li> <li>● Leave your itinerary with someone who knows precisely where you will be, when you plan to return and who to contact if you don't return when expected.</li> <li>● Carry a first aid kit, emergency whistle, rain gear, bivouac gear, head lamp and extra water, food and clothing.</li> <li>● Carry a fully charged cell phone or satellite communication device programmed with emergency contacts.</li> </ul>
	Boundary lines near roadways	<ul style="list-style-type: none"> <li>● Wear blaze orange vests with reflective tape.</li> <li>● When working, plan for distracted drivers. Use cones and signals to alert motorists. When possible, place the vehicle between the boundary monitor and traffic.</li> </ul>
	Heavy brush (thorns)	<ul style="list-style-type: none"> <li>● Wear protective clothing such as a long sleeve shirt, long pants, work gloves, and protective eyewear.</li> <li>● Watch for others when discarding brush.</li> </ul>
	Slips, trips, and falls	<ul style="list-style-type: none"> <li>● Walk slowly and carefully, resting when necessary, keeping your center of gravity low in especially rough terrain. Test the stability of stepping surfaces and hand holds as you go.</li> <li>● Be mindful that recent ice or rain may make surfaces slippery.</li> <li>● If you slip, try to fall backwards sitting down instead of going forwards and/or downhill.</li> <li>● Because tools are often hand-carried, make a special effort to maintain your balance. Whenever possible, keep hands free when walking as much as possible to help catch yourself if you fall.</li> <li>● Stay alert: Many property lines follow wire fences – be extra careful and point out tripping hazards to the person behind you.</li> <li>● In steep, hazardous terrain, consider wearing a helmet/hard hat with a chin strap.</li> <li>● Do not work on boundary sections where you do not feel safe. Turn back or find a way to walk around steep, treacherous sections.</li> </ul>
	Animals	<ul style="list-style-type: none"> <li>● Be observant of snakes which like to live under logs and shady areas; Be Bear Aware.</li> <li>● Keep an eye out for adjacent property owners' dogs.</li> </ul>
	Contact with ticks, spiders, mosquitoes, other stinging Insects, poisonous, irritating or photosensitizing plants.	<ul style="list-style-type: none"> <li>● Identify crew members that are allergic and create a response plan with them if a reaction occurs. Know where their EpiPen is.</li> <li>● Search your body, especially hair and clothing, for ticks and insects regularly. Bathe and/or change clothes after each work day.</li> <li>● Use insect repellent</li> <li>● Be aware of potential for hives in brush, in the ground or hollow logs.</li> <li>● Clothing should fit tight at the wrists, ankles and waist.</li> <li>● Tuck in shirt tails.</li> <li>● Wear work glove, observe where you are placing your hands to avoid contact with poisonous or irritating plants.</li> </ul>
	Hunter Related Injuries	<ul style="list-style-type: none"> <li>● Wear high-vis clothing while working. Required during hunting season.</li> </ul>

		<ul style="list-style-type: none"> <li>● For boundary sections where hunting is allowed, consider scheduling work trips outside of the hunting season.</li> </ul>
Overhead Hazards	Injury from falling rocks and limbs, or other overhead hazards	<ul style="list-style-type: none"> <li>● Be aware that rocks or trees used for hand holds may be unstable.</li> <li>● If you knock a rock or log loose, shout a warning (usually, "Rock!") to alert other volunteers to the hazard. Where appropriate, travel single file so no one is below a falling hazard.</li> <li>● Beware of overhead hazards while working in the woods.</li> <li>● If high winds are predicted or present, reschedule work activity.</li> <li>● In steep, hazardous terrain, consider wearing a helmet/hard hat with a chin strap.</li> </ul>
Brushing and clearing line	Injury from tools	<ul style="list-style-type: none"> <li>● Wear gloves while using sharp tools to prevent injury to hands. Carry tools on the downhill side of your body with the sharp side pointed down.</li> <li>● Keep the hand holding the stem above the saw when cutting.</li> <li>● Use the appropriate tool for the job – do not strain to use hand pruners on a branch too large for it.</li> <li>● Do not use a machete for boundary work.</li> <li>● Hand tools should be secured with no exposed blade while traveling on difficult terrain. Keep saw folded or sheathed while walking.</li> <li>● Cut all stumps flush to the ground to avoid creating future tripping hazards.</li> <li>● When cutting a sapling or blowdown, make sure volunteers are clear of the area. Give a verbal warning before cutting a sapling.</li> </ul>
Hanging signs with a hammer, installing washer and nail in witness trees	Injury to head and hands	<ul style="list-style-type: none"> <li>● Drive nails with steady, controlled hits.</li> <li>● Do not swing the hammer wildly.</li> <li>● Wear gloves while driving nails.</li> </ul>
Painting	Paint exposure: skin, eyes, inhalation.	<ul style="list-style-type: none"> <li>● Carry paint in a sealable container. Keep the paintbrush covered when not in use.</li> <li>● Avoid contact between paint and skin. Wear long sleeves, long pants, eye protection, and gloves when appropriate.</li> <li>● Wash promptly when skin becomes contaminated. Wipe off spilled, sprayed or splattered paint from skin immediately with a clean cloth, hand wipes, or mineral spirits.</li> <li>● Position yourself upwind of where you are painting to minimize inhalation of paint vapor. Work in areas with good air circulation. Transport paint in sealed containers.</li> <li>● Avoid transporting paint in the passenger compartment of a vehicle.</li> </ul>
Public Contact	Bodily harm from the public.	<ul style="list-style-type: none"> <li>● Wear orange vests and/or official ATC Boundary shirts.</li> <li>● Stay on public land as much as possible. Do NOT walk on private land without landowner permission.</li> <li>● Be courteous and respectful. Act professionally, avoiding confrontations. Be tactful and walk away from confrontations before they become dangerous.</li> <li>● If a landowner or member of the public becomes confrontational, leave immediately and end field activities in the area for the day. Notify the land manager.</li> </ul>
Monitoring Encroachments	Modified environment, hostile interactions	<ul style="list-style-type: none"> <li>● Use best judgment in approaching encroachments. You may encounter a dangerous environment or hostile interactions with neighbors.</li> <li>● Use encroachment flow chart and notify the land manager.</li> </ul>
Remediating Encroachments	Risks due to removing encroaching items	<ul style="list-style-type: none"> <li>● Review appropriate JHAs related to the remediation activity.</li> <li>● When unsure of best management practice, consult with the land manager.</li> </ul>

10. OFFICIAL SIGNATURE

11. TITLE

12. DATE

**Chief Ranger/CDSC**

**02/11/2025**