

U.S. Department of Agriculture Forest Service		1. WORK PROJECT/ACTIVITY	2. LOCATION	3. UNIT
		<b>Wilderness Ranger</b>	<b>Chattahoochee-Oconee NF</b> <b>National Forests in North Carolina</b>	<b>Blue Ridge District</b> <b>Chattooga District</b> <b>Tusquittee District</b>
<b>JOB HAZARD ANALYSIS (JHA)</b> References-FSH 6709.11 and -12 (Instructions on Reverse)		4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED
7. TASKS/PROCEDURES		<b>Karen Larsen</b>	<b>District ORA</b>	<b>01/24/2020</b>
		8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE	
<b>Field Work</b>		Working in Remote Area	<ul style="list-style-type: none"> <li>Maintain visual, voice or radio contact with crew members</li> <li>Ensure portable radios are charged and functional</li> <li>Carry extra batteries as capacity is reduced in cold weather</li> <li>Monitor local weather before field activities begin</li> <li>Adhere to communication procedures as outlined in the Emergency Evaluation Plan at the end of the JHA</li> <li>Always sign out at office with location and time of your return</li> <li>Be aware of wild animals within your work location</li> <li>Obtain and utilize SPOT device if available</li> </ul>	
		Working Alone	<ul style="list-style-type: none"> <li>Sign out at district office and notify supervisor of planned destination and radio and/or SPOT checks</li> <li>Be aware of surroundings and hazards that may cause injury</li> <li>Manage your time in order to get back to your base camp in adequate time before dark</li> </ul>	
		Field Safety	<ul style="list-style-type: none"> <li>Make sure you are wearing appropriate PPE per work being performed</li> <li>Make sure you carry a First Aid Kit at all times with up to date supplies</li> </ul>	

	Encounters with the Public	<ul style="list-style-type: none"><li>• Be visible to the public by wearing uniforms when making contacts</li><li>• Always be aware of personal space and surroundings</li><li>• If the public becomes aggressive or physically threatening, leave the area immediately. Move a safe distance away and write down any pertinent information and contact law enforcement</li><li>• When the public has a concern, assess the situation and take appropriate action. Be as professional as possible, if you cannot answer the question, don't make it up. Give them the contact information necessary that pertains to their issue</li><li>• There is safety in numbers. Try to travel in groups whenever possible</li><li>• Do not let the public know where your base camp is</li></ul>
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<b>Drinking Water</b>	Illness	<ul style="list-style-type: none"> <li>• Take plenty of water to stay hydrated</li> <li>• Know the location of your nearest water sources</li> <li>• Treat water sources by filter, boil, or tablets</li> <li>• Bring extra water for emergencies for yourself or the public</li> </ul>
<b>Weather</b>	Lightning Strikes	<ul style="list-style-type: none"> <li>• Seek appropriate shelter immediately</li> <li>• Avoid areas such as high terrain, open landscapes, and trees</li> <li>• Set aside tools or other metal object in your possession</li> <li>• Turn off all electrical devices</li> </ul>
	Heat Stress/Hypothermia	<ul style="list-style-type: none"> <li>• Wear proper clothing for appropriate weather conditions</li> <li>• Drink plenty of fluids</li> <li>• Avoid over exhaustion in hot weather</li> <li>• Bring extra clothing for severe weather</li> </ul>
<b>Foot Travel</b>	Sore feet, blisters, and strain	<ul style="list-style-type: none"> <li>• Wear comfortable lace-up work boots with a Vibram non-skid sole.</li> <li>• Wear snug fitting cotton wool socks to provide cushioning, sweat absorption, insulation and comfort</li> <li>• Take appropriate action to protect hot spots, blisters or any other foot tenderness</li> <li>• Use proper body positioning, firm grip, lift with legs and get assistance when needed</li> </ul>
	Slips, Trips, and Falls	<ul style="list-style-type: none"> <li>• Do not lean into a hill when contouring; loosens footing</li> <li>• Plan ahead, select safe routes, and watch for changes in ground surface, slick spots or other unusual hazards</li> <li>• Don't get in a hurry and always be sure footing is firm particularly when crossing creeks</li> <li>• Select each stepping spot carefully and do not shift body weight until you are sure footing is solid</li> <li>• Know how to fall. Keep flexible with knees slightly bent. Do not stick out arm to break your fall. Roll with the fall</li> <li>• In heavy undergrowth, lift knees high to clear obstacles</li> <li>• Avoid walking on logs; step over them, not on them</li> <li>• While walking downhill, on slippery ground or loose footing, keep your weight on your heels, take shorter strides, keep knees bent, lean slightly backwards and use as much of the inside of your feet as possible</li> </ul>
	Loose Rocks, Bad Footing	<ul style="list-style-type: none"> <li>• Maintain safe walking distance between people; at</li> </ul>

		<ul style="list-style-type: none"> <li>• least 10 feet</li> <li>• Avoid walking up a steep slope directly under another person</li> <li>• Avoid kicking out loose rocks</li> <li>• Avoid stepping on blow-down</li> <li>• Communicate hazards with co-workers</li> </ul>
<b>Wildlife &amp; Pest Interactions</b>	Avoid/ Treating Tick Bites	<ul style="list-style-type: none"> <li>• Spray clothing with insect repellent as a barrier</li> <li>• Wear light colored clothing that fits tightly at the wrists, ankles, and waist</li> <li>• Each outer garment should overlap the one below it</li> <li>• Cover pant legs with high socks or boots</li> <li>• Tuck in shirts</li> <li>• Search the body on a regular basis, especially hair and clothing; ticks generally do not attach for the first couple of hours</li> <li>• If a tick becomes attached, pull it by grasping it as close as possible to the point of attachment and pull straight out with gentle pressure. Wash skin with soap and water then cleanse with rubbing alcohol. Place the tick in an empty container for later identification, if the victim should have a reaction. Record dates of exposure and removal</li> <li>• Do not try to remove the tick by burning with a match or covering it with chemical agents</li> <li>• If you cannot remove the tick, or the head detaches, seek prompt medical help</li> <li>• Watch for warning signs of illness: a large red spot on the bite area, fever, chills, headache, joint and muscle ache, significant fatigue, and facial paralysis are reactions that may appear within two weeks of the attack. Symptoms specific to Lyme disease may include: confusion, short term memory loss, and disorientation</li> </ul>
	Avoid/Treating Stings	<ul style="list-style-type: none"> <li>• Be alert to hives in brush or in hollow logs. Watch for insects travelling in and out of one location</li> <li>• If you or anyone you are working with is known to have allergic reactions to bee stings, tell the rest of the crew and your supervisor. Make sure you carry emergency medication with you at all times</li> <li>• Wear long sleeve shirts and pants, tuck in shirt. Bright colors and metal objects may attract bees</li> <li>• If you are stung, cold compresses may bring relief</li> <li>• If a stinger is left behind, scrape it off the skin. Do not use a tweezers as this squeezes the venom sack, worsening the injury</li> <li>• If the victim develops hives, asthmatic breathing, tissue swelling, or a dip in blood pressure, seek</li> </ul>

		<p>medical help immediately. Give victim antihistamine (benadryl)</p>
	Avoiding/Treating Mosquito Bites	<ul style="list-style-type: none"> <li>• Wear long sleeve shirts and pants</li> <li>• Avoid heavy scents</li> <li>• Use insect repellants. If using DEET, do not apply directly to skin, apply to clothing only</li> <li>• Keep away from bananas and increase consumption of garlic</li> <li>• Carry after-bite medication to reduce skin irritation</li> </ul>
<b>Camp</b>	Camping techniques	<ul style="list-style-type: none"> <li>• Use camping techniques following Leave No Trace principles as a reference and Health and Safety Code Handbook 6709.11.55.12</li> <li>• Use of bear cannisters or proper hanging facilities for food storage</li> </ul>
	Risk Assessment	<ul style="list-style-type: none"> <li>• Procure foodstuffs carefully</li> <li>• Avoid glassware, serrated knives, and other sharp objects</li> <li>• Sufficient space to prevent overcrowding around communal areas</li> <li>• Cooking areas should be on level ground with appropriate spacing between individuals</li> <li>• Properly store all gear promptly after use</li> </ul>
	Camp Site	<ul style="list-style-type: none"> <li>• Use of safe camp site selection policy in the Health and Safety Code Handbook 6709.11.22.2. The following will be considered when determining a camp site for employees:</li> <li>• Snags and other overhead hazards</li> <li>• Leaning green trees in unstable or saturated soils</li> <li>• Danger from rolling rocks and slides</li> <li>• Danger of flooding</li> <li>• Known animal problems</li> </ul>
<b>Safety Responsibilities</b>		<ul style="list-style-type: none"> <li>• Backcountry Rangers will be responsible for covering, understanding and complying by this JHA and district policies of the Chattahoochee- Oconee and Forests of North Carolina</li> <li>• Crewmembers will receive a personal copy of this JHA</li> <li>• Pertinent updates will be added to this JHA as they arise through crew interaction and weekly safety sessions</li> </ul>
<b>Emergency Evaluation Plan/Communication</b>	Dead spots where radio contact is not possible	<ul style="list-style-type: none"> <li>• Always sign out at office with location and time of your return</li> <li>• Take extra clam shells and batteries for your portable radio and/or SPOT device</li> <li>• If an accident occurs in an area where there is no radio communication, have one member of the crew climb to a high point and radio for assistance. If</li> </ul>

		<p>communication is still not possible, have a crewmember travel to find help while other members perform first aid</p>
	<p>After Hours</p>	<ul style="list-style-type: none"> <li>• Radio the District Office to notify them and your supervisor</li> <li>• If the District Office is closed, contact the LEO on the district and have them notify your supervisor</li> <li>• Do daily check-in with update of location and plan</li> <li>• Utilize locations with cell phone service to check-in</li> <li>• When field tour is completed, contact supervisor</li> </ul>
	<p>Injury</p>	<ul style="list-style-type: none"> <li>• In cases of emergency: depending on severity and sound judgement, request proper medical assistance</li> <li>• If situation improves or deteriorates; adjust rescue or evacuation actions accordingly ( ie. Mechanized equipment in wilderness)</li> <li>• Know your location and emergency trail route names &amp; numbers.</li> <li>• Report an accident, even a minor one, to your supervisor</li> </ul>

10. LINE OFFICER SIGNATURE	11. TITLE  <b>Blue Ridge District Ranger</b>  <b>Chattooga District Ranger</b>  <b>Tusquittee District Ranger</b>	12. DATE
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**JHA Instructions (References-FSH 6709.11 and .12)**

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.

**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

**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 furniture.
- 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.

**Emergency Evacuation Instructions (Reference FSH 6709.11)**

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:

- 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.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

**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:

<b>SIGNATURE</b>	<b>DATE</b>	<b>SIGNATURE</b>	<b>DATE</b>
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Work Leader			