

United States Department of Agriculture FOREST SERVICE JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and .12 (Instructions on Reverse)	1. WORK PROJECT/ACTIVITY Trail Maintenance for Trail Partners	2. LOCATION SUPERIOR NATIONAL FOREST	3. UNIT Tofte and Gunflint Ranger Districts
	4. NAME OF ANALYST Jon Benson	5. JOB TITLE Recreation Specialist	6. DATE PREPARED/Updated January 2014
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE	
Field Work	Working in Remote Areas	<ul style="list-style-type: none"> • Conduct a Tailgate Safety Session prior to beginning any new work assignment. • Maintain contact with crew members. • Be aware of upcoming weather patterns. • Carry a list of emergency contact phone numbers for contingencies • Be aware of animals and make noise while travelling in wildlife territory • Do not try to sneak up on or surprise wild animals. Always maintain a safe distance. • Have food, water, dry clothes, first-aid, and other emergency items available. • Be aware of other seasonal traffic on forest roads. • Let others know of traffic conditions/hazards. • Avoid working in forested areas during high winds where blow down is likely to occur. 	
Field Work (cont)	Encounters with the Public	<ul style="list-style-type: none"> • Identify yourself as a Forest Service volunteer if approached by the public. • If the public becomes aggressive or physically threatening, leave the area immediately via foot or vehicle. Move a safe distance away and write down any pertinent information (including vehicle description, license number and identify if known, <i>report it immediately</i>). • (Public Concern) Have the citizen explain the concern fully, assess the situation and take appropriate action. Do not argue, be as polite as possible. • If you don't know the answer to their questions, answer truthfully. Offer the phone number for the District office, or ask if they would prefer someone to get back to them; if so, get their name and contact information. Travel in pairs whenever possible. • Be cognizant of your surroundings and anything that may appear unusual. • If possible, avoid areas of known conflict. • Wear appropriate clothing for anticipated weather and work conditions. 	

Weather Related	Harsh Weather	<ul style="list-style-type: none"> • Dress appropriate for current weather conditions. • Be prepared for changing weather conditions. • Drink water frequently to avoid dehydration. • Watch for signs of hypothermia and/or heat stress
Weather Related (cont)	Lightning Strikes	<ul style="list-style-type: none"> • Seek indoor shelter immediately, if available. • If outdoors get into a hard topped vehicle. Stay away from trees, machinery, fences and other groups of people. • Turn off all radios and electronic equipment. • If you feel a tingling sensation on your hair or your hair stands on end, immediately crouch and cover your head. DO NOT lie down or place hands on the ground.
Working Alone	Working Alone	<ul style="list-style-type: none"> • Avoid working alone. If you must work alone, ensure that you leave an itinerary with another individual including your projected return time, and steps to take in case you are overdue. • Be aware of surroundings and hazards that may cause injury. • Manage time and allow for adequate time to return home.
Drinking Water	Illness, dehydration	<ul style="list-style-type: none"> • Take plenty of water with you. • Drink water frequently. • Know the location of available drinking water. • Treat surface water sources (filter, boil, or chemically treat).
Physical Stress	Long Work Hours/Fatigue	<ul style="list-style-type: none"> • Take breaks as necessary and drink water frequently. • Recognize signs of fatigue and discontinue work if fatigue is having a negative effect on physical performance or judgement.
Heat/ temperature management	Heat Stress/Hypothermia	<ul style="list-style-type: none"> • Wear proper clothing for the weather conditions. • Drink plenty of water. • Be physically fit. • Carry dry spare clothing.

Tool Use	Field Safety	<ul style="list-style-type: none"> • Carry a field first-aid kit when working far from vehicles or assistance. • Wear Personal Protective Equipment appropriate for the following tasks: <ul style="list-style-type: none"> • All trail work <ul style="list-style-type: none"> • Gloves • Nonskid boots • Chainsaw/ Crosscut Saw <ul style="list-style-type: none"> • All sawyers must be currently qualified through a Forest Service training course • Hardhat • Gloves • Eye protection • Pants that reach the top of your boots • Cut resistant or leather boots with nonskid sole • Hearing protection required for chainsaw use • Refer to Chainsaw JHA for additional details • Brush Saw <ul style="list-style-type: none"> • Hardhat • Gloves • Eye Protection • Cut resistant or leather boots with nonskid soles • Hearing Protection rated to 85 dB and above • Pants that reach the top of your boots • Chaps are recommended • Pruning saw or bow saw <ul style="list-style-type: none"> • Hardhat • Eye Protection • Gloves • Nonskid boots • Loppers/ Nippers <ul style="list-style-type: none"> • Gloves • Hardhat (if cutting above shoulder level) • Nonskid boots • Eye Protection • Shovel or Pry Bar <ul style="list-style-type: none"> • Gloves • Nonskid boots • Pants that reach the top of your boot • Axe/ Pulaski <ul style="list-style-type: none"> • Gloves • Hardhat • Nonskid boots • Eye protection • Pants that reach the top of your boots
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	Snags/Green Tree Hazards	<ul style="list-style-type: none"> • Wear proper PPE (hard hat/safety glasses/ gloves etc). • Be observant of surroundings (i.e. snags that have already fallen or trees that appear to be leaning severely). • Do not take breaks in hazard tree areas (standing, sitting, etc). • Be aware of increasing winds or a forecast of increasing winds. • Identify high-risk tree species such as old or decaying birch and aspen. • Seek shelter in a less dangerous or protected area (i.e. clear-cut or meadow, face into wind and prepare to avoid falling material).
	Overhead Branches	<ul style="list-style-type: none"> • Wear proper PPE (hard hat/safety glasses/ gloves etc). • Maintain safe walking distance between people – at least 10 feet. • Be cognizant of broken tops or branches that may be lodged in live or dead limbs.
	Cuts and Scrapes	<ul style="list-style-type: none"> • Wear proper PPE (hard hat/safety glasses/ gloves etc). • Be especially aware of people in front of you and behind you while walking through thick brush or timber, and be cautious of branches that might fall or spring back as you pass.
Foot Travel	Slips, Trips and Falls	<ul style="list-style-type: none"> • Plan ahead, select safe routes, and watch for changes in ground surface, slick spots or other unusual hazards. • Don't get in a hurry and always be sure footing is firm particularly when entering water or crossing creeks. • When on uneven terrain, select each stepping spot carefully and do not shift body weight until you are sure footing is solid. • Know how to fall. Keep flexible with knees slightly bent. Do not stick out arm to break your fall. Roll with the fall. • Avoid walking on logs, step OVER them, not ON them. • 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. • Wear appropriate clothing for anticipated weather or work conditions.

Hand Tools & Equipment	Injury	<ul style="list-style-type: none"> • Check hand tools for sound handles prior to use. • Replace/repair all tool handles that have splits, cracks or loose handles. • Always use a tool sheath when not in use. • Keep tools sharp. • Learn and utilize the proper techniques for tool use and sharpening. • Use the right tool for the job. • Carry tools on the downhill side or the trail, and sharp side down. • Know and utilize proper saw techniques. • Always carry saws sheathed. • Do not carry tools over the shoulder. • Always secure tools when travelling in a vehicle and never carry in same compartment as personnel. • Avoid glancing blows. • Maintain a safe working distance (10' minimum). • For chain saws, please refer to the JHA on chainsaws.
Sharpening tools using hand file	Cuts to body (hands) Metal slivers in hands	<ul style="list-style-type: none"> • Always wear gloves and goggles when sharpening tools. • Prior to filing, fit the file with a handle and knuckle guard. • When sharpening an axe or pulaski blade with a stone, work the stone in small circles across and "into" the blade. • Follow tool sharpening instructions carefully. Never sharpen cutting edges all the way to the footplate.
Avoiding / Treating Tick Bites	Lyme Disease/Tick Diseases	<ul style="list-style-type: none"> • Spray clothing with insect repellant as a barrier. • Wear light colored clothing that fits tightly at the wrists, ankles, and waist. • Each outer garment should overlap the one above it. • Cover trouser legs with high socks or boots. • Tuck in shirt tails. • Search the body on a regular basis, especially hair and clothing; ticks generally do not attach for the first couple of hours. • 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. • Do not try to remove the tick by burning with a match or covering it with chemical agents. • If you cannot remove the tick, or the head detaches, seek prompt medical help. • 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 include: confusion, short-term memory loss, and disorientation.

Avoiding / Treating Bee Stings	Allergic reactions/stings	<ul style="list-style-type: none"> • Be alert to hives in brush or in hollow logs. Watch for insects travelling in and out of one location. • 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 before going to the field. Make sure you carry emergency medication with you at all times. • Wear long sleeve shirts and trousers; tuck in shirt. Bright colors and metal objects may attract bees. • If you are stung, cold compresses may bring relief. • 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. • If the victim develops hives, asthmatic breathing, tissue swelling, or a drop in blood pressure, seek medical help immediately. Give victim antihistamine (Benadryl, chlo-amine tabs).
Avoiding / Treating Mosquito Bites	Skin irritation/mosquito-borne illnesses	<ul style="list-style-type: none"> • Wear long sleeves and trousers. • Avoid heavy scents. • Use insect repellants. If using DEET, do not apply directly to skin, apply to clothing only. • Carry after-bite medication to reduce skin irritation.
Working in Bear Country	Encounter of a Bear	<ul style="list-style-type: none"> • DO NOT RUN: When you run you may look like prey to the bear. • Do not threaten the bear and force it to fight back. • Allow an escape route for the bear. • Talk to the bear in low, soft tones and slowly back away. • Avoid surprising bears. • Be aware of wind direction. If the wind is in your face the bear may not smell you. • Make noise in suspected bear areas; look for bear sign including digging or scat.
	Cubs	<ul style="list-style-type: none"> • Avoid sows with cubs when at all possible. • Back away slowly in the direction from which you came. Continue to avoid the area.
	Food Storage	<ul style="list-style-type: none"> • Store all food and other attractants (cooking and eating utensils, grills, stoves, fuel, fishing tackle, ice chests/coolers, trash, wash basins, cosmetics, toiletries, beverage containers, perfumes, soaps) unavailable to all wildlife, including bears.

Accident Documentation and Procedures	Injury	<ul style="list-style-type: none"> • In cases of emergency, depending on severity and sound judgment, contact Forest Service volunteer coordinator and follow the Emergency Evacuation Instructions • Know your location, and emergency route numbers (applicable in areas that have posted US National Grid numbers). • Report an accident, even minor to your Forest Service volunteer coordinator. 	
Safety Responsibilities		<ul style="list-style-type: none"> • Trail crewmembers will be responsible for reviewing, understanding and complying by this JHA and Superior National Forest policies. • Each crewmember will sign the master copy of this JHA or a copy of the medical certification addendum on completion of a formal overview. • Pertinent updates will be added to this JHA as they arise through crew interaction and tailgate safety sessions. 	
Other JHAs to reference if applicable		<ul style="list-style-type: none"> • Chainsaw • ATV Travel • Snowmobile Travel 	
10. LINE OFFICER SIGNATURE /s/ Kurt Steele /s/ Nancy Larson		11. TITLE Tofte District Ranger Gunflint District Ranger	12. DATE 3/21/14 4/3/14

Previous edition is obsolete.