## National Park Service U.S. Department of the Interior





	lazard Analysis (JHA)			
Position:	Steward	Division:	Resource Management	
Work Activity:	Removing invasive species, working with plants	Prepared by:	Rebecca George, 4-1-2024	
Supervisor:		Approved by:		
Date of Last Revision:	7-2-2024	Notes:	Volunteers will be instructed about safety measures and protocol. Volunteers may use shovels, loppers, gloves etc., for personal protection and to perform duties.	
TASK/PROCEDURE		HAZA	RDS	SAFE JOB PROCEDURES
Bending over and carrying heavy loads		Bending over repeatedly can cause back pain, tendonitis, aches, sprains, fatigue.		<ul> <li>Don't overdo it, know limits.</li> <li>Avoid doing repetitive motions for long periods of time and switch off tasks with others.</li> <li>Carry out warm-up wrist and muscle exercises before beginning.</li> </ul>
Collecting litter		Exposure to garbage and litter		<ul> <li>Always wear rubber gloves and use trash bags when collecting litter.</li> <li>Never pick up any litter with bare hands.</li> <li>Pay particular attention to any litter than has fluids on it, such as blood.</li> <li>Use extreme care when disposing.</li> <li>Report any injury, no matter how slight, obtained through removing litter.</li> <li>Any human waste should be reported to maintenance to remove.</li> </ul>
Exposure to the elements		Extreme exposure to the sun can cause sunburn, dehydration, heat exhaustion, or sunstroke.		<ul> <li>Always wear a hat when out in direct sunlight.</li> <li>Wear sunscreen and long sleeves.</li> <li>Drink plenty of fluids, preferably water.</li> <li>Know the signs of sunstroke, dehydration, and heat exhaustion.</li> </ul>
		Exposure to cooler to wind can cause shive hands and fingers, et	ring, fatigue, cold	<ul> <li>Wear several layers of loose fitting, lightweight, warm clothing rather than one layer of heavy clothing. The outer garments should be tightly woven and water repellent.</li> <li>Wear mittens or gloves.</li> <li>Wear a hat. Cover your mouth with a scarf to protect your lungs.</li> <li>Wear thick socks and sturdy shoes.</li> </ul>

Hiking or walking on uneven or slippery surfaces	Tripping, falling, or losing balance along with subsequent injury could occur.	<ul> <li>Wear appropriate footgear - sturdy but comfortable shoes or boots.</li> <li>Care should be taken when crossing uneven or slippery surfaces.</li> <li>Always wear good quality, thick, cotton or wool socks.</li> <li>Don't be preoccupied while walking.</li> <li>Be aware of your surroundings.</li> </ul>
Operating tools (shovel, saw, rake, handsaw, lopper, hammer, etc.)	Potential for various injuries (back and shoulder pain, pinching fingers, blisters, fatigue, muscle strain, etc.) resulting from use of equipment.	<ul> <li>Follow given safety protocols.</li> <li>Maintain a firm grip on tool handles.</li> <li>Be sure other people are clear before removing tools.</li> <li>Maintain organized tool racks to prevent falling.</li> <li>Keep points and blades facing down and tools parallel to the ground.</li> <li>Wear appropriate PPE for tool being used.</li> </ul>
Exposure to disease-carrying bugs	Subject to Lyme disease, rashes, sickness, etc.	<ul> <li>Wear clothing that covers your arms and legs.</li> <li>Wear light-colored clothing to help you see if a tick is on you.</li> <li>Stay out of grassy areas if possible.</li> <li>Use a chemical repellent with DEET.</li> <li>Thoroughly check yourself for ticks and other bugs before and after trail maintenance.</li> <li>If you find a tick, remove it using tweezers.</li> <li>Wear long pants and tuck them into your socks.</li> </ul>
Building and fence upkeep	Injury to oneself or others while operating tools and/or fixing the building or fence.	<ul> <li>Be aware of surroundings.</li> <li>Utilize protective equipment.</li> <li>Properly utilize tools and follow safety precautions.</li> <li>Be aware of tripping hazards.</li> <li>Follow instructions and guidance concerning the repairs.</li> </ul>
Standing for long periods of time	Subject to muscle strain, soreness, lower back, and leg pain	<ul> <li>Takes breaks.</li> <li>Sit down when prudent.</li> <li>Pace work appropriately.</li> <li>Use floor mats.</li> <li>Wear comfortable and supportive shoes.</li> </ul>

Working around animals	Potential for injury	<ul> <li>Be aware of your surroundings and stay alert.</li> <li>Follow safety protocols.</li> <li>Approach animals with caution and remain calm.</li> <li>Wear personal protective equipment.</li> <li>Restrain animals properly if necessary.</li> <li>Have an exit strategy.</li> </ul>
Working around thorny plants	At risk of cuts and scrapes	<ul> <li>Be aware of your surroundings</li> <li>Wear appropriate PPE for tool being used.</li> <li>Make sure your tetanus shot is up to date.</li> <li>Ask for assistance if necessary.</li> </ul>
Removing vegetation	Potential for various injuries including being struck by loose branches stuck in a tree or shrub and wildlife nests (including insects).	<ul> <li>Wear appropriate PPE for tool being used (e.g., sturdy shoes/boots, long sleeve clothing, and gloves)</li> <li>Be aware of your surroundings. Look up, look down, and look around you before removing any vegetation.</li> <li>Inspect vegetation for hanging branches, nests (birds and insects), and animals before removing vegetation.</li> <li>When removing vines, cut low to the ground and at shoulder height to create a "window". Never pull vines of a trees or large shrubs.</li> <li>When removing large shrubs, start with branches on the edges and make your way forward towards the center.</li> <li>Use appropriate tool for the job (do not attempt to cut something that is too big for the tool).</li> </ul>