

**NOTE: Any yellow text shading or red text annotations have been added by ORNL Subject Matter Experts (SMEs). The annotations have been made in order to document (1) certain Forest Service requirements that have been waived or (2) where some requirements for the ORNL participants have been clarified or established within the ORNL Research Safety Summary (RSS) instead. The RSS 7728 is the work control document that governs the ES&H the activities/actions of the ORNL participants doing work at the Marcell Experiment Station.**

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY <b>Field Work: weather hazards</b>	2. LOCATION <b>Grand Rapids, MN</b>	3. UNIT <b>NC-4101, 4351</b>
JOB HAZARD ANALYSIS (JHA) <b>References-FSH6709.11 and -12 (Instructions attached)</b>	4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED

7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS
Working outdoors	<p>(1) Hypothermia, frostbite</p> <p>(2) Heat stroke, heat exhaustion</p> <p>(3) Lightning</p> <p>(4) High winds with flying/falling objects</p> <p>(5) Flash floods</p> <p>(6) Tornadoes</p>	<p>Engineering Controls * Substitution * Administrative Controls * PPE</p> <p>(1) <b>Wear proper clothing, footgear, equipment.</b> <i>ORNL SME: See RSS LAST Question for field clothing requirements and guidance.</i> Avoid conditions of extreme cold/wind chill.</p> <p>(2) <b>Wear loose fitting light clothing and hats.</b> <i>.ORNL SME: See RSS LAST Question for field clothing requirements and guidance.</i> Drink plenty of liquids. Rest frequently. Avoid heavy activity in extremely hot, humid conditions. <i>ORNL SME: Also see RSS Question 13.5 for additional information</i></p> <p>(3) Be aware of weather conditions. Stay away from trees, ridge tops, tall objects, metal objects, and power lines during electrical storms. The safest place is inside a vehicle (rubber tires will insulate). <i>ORNL SME: Also see RSS Question 13.5 for additional information</i></p> <p>(4) Leave areas containing unstable objects (snag, dead branches, etc.) during windstorms.</p> <p>(5) Drive or climb to higher ground during heavy rainfall/storms when flash flooding is possible.</p> <p>(6) If time does not allow you to get to a safe place inside, lie flat in the nearest depression, ditch, or ravine, but watch for flooding waters.</p>

	<p>(7) Unsafe ice</p> <p>(8) Sunburn</p>	<p>(7) Be absolutely certain ice is thick enough before venturing onto it. Be extremely wary of ice over moving water, near lake inlets and outlets, and connecting channels. Avoid snow drifts or deep snow in such areas. Carry spikes (ice claws).</p> <p>(8) Wear sun screen, proper clothing, hat, to avoid sunburn. Wear sunglasses to protect eyes.</p> <p><b>ORNL SME: Instead, See RSS LAST Question for further details and requirements of eye protection.</b></p>
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10. LINE OFFICER SIGNATURE	11. TITLE	12. DATE
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