

**WIND CAVE NATIONAL PARK
JOB HAZARD ANALYSIS FORM**

JOB TITLE: Off-trail caving **DATE OF ANALYSIS:** 08/22/12

REQUIRED EQUIPMENT & TOOLS FOR JOB:	REQUIRED SAFETY EQUIPMENT:
<ul style="list-style-type: none"> * gloves * side-mounted pack * watch * three independent light sources (two helmet mountable) * extra batteries 	<ul style="list-style-type: none"> * UIAA approved helmet with four-point suspension chin strap * knee/elbow pads * well-treaded hiking shoes or boots * adequate drinking water * adequate energy food supply * cave map/line plot

POTENTIAL HAZARDS:	SAFETY PROCEDURES:
<p>Special hazards of Wind Cave</p> <hr/>	<ul style="list-style-type: none"> * The upper levels of the cave tend to be crumbly- be sure of holds when climbing * When in the lower levels, be aware of false floors <hr/>
<p>Unprepared / Lost</p> <hr/>	<ul style="list-style-type: none"> * Have maps/line plots and study intended route * Identify hazards along the route * Inspect and test equipment before using. Be sure all equipment is adequate for the cave trip * Stick to planned route * Include all potential areas/surveys that will be visited on the trip permit <hr/>
<p>Overdue party/Late</p> <hr/>	<ul style="list-style-type: none"> * Complete a Trip Permit before entering the cave, have it in the required place * Establish a surface watch (be sure they have emergency phone numbers) * Allow reasonable amount of time to leave cave by set exit time <hr/>
<p>Exertion/exhaustion</p> <hr/>	<ul style="list-style-type: none"> * Recommend proper physical conditioning. * Quick energy foods should be consumed to keep up with calorie utilization * Sufficient water should be consumed to prevent dehydration * Avoid overexertion, the group should pace itself for the slowest member <hr/>
<p>Unstable rocks</p> <hr/>	<ul style="list-style-type: none"> * Be extra cautious on breakdown piles, especially in areas rarely or never before visited * Climb one at a time * Yell "ROCK"! if you dislodge a rock <hr/>
<p>Exposure</p> <hr/>	<ul style="list-style-type: none"> * Use a handline if anyone in the party feels uncomfortable with a climb * Maintain three points of contact at all times and inspect all hand and footholds before trusting them * Use a spotter for unskilled climbers <hr/>
<p>Slippery surfaces</p> <hr/>	<ul style="list-style-type: none"> * Be sure your boots have adequate tread on the soles * Slow travel speed when in a slippery area <hr/>
<p>Tight squeezes</p>	<ul style="list-style-type: none"> * Tight squeezes should only be attempted by experienced cavers that know their limits