Lesson Plan: Brett Wuth

Cold Weather SAR

Scope:

What is included in this lesson, what's not and why.

Objectives:

At the conclusion of this lesson the participants: 1. will be able to

Time Plan:

Total Time: 30 minutes

Start	Material
00:00 3 min	1
00:03	 instructional points in normal font <i>aids, exercises, activities in italic</i>
	 Working in a cold environment Hydration crucial to keeping body running efficiently cold air becomes dry when warmed by the body [1] good: water, soup, juice, powdered juice crystals [1] good: sports drinks, bad: energy drinks [1] okay: hot chocolate (less caffeine, more carbohydrates) [1] bad: coffee, teas, cola drinks [1] bad: snow [1] bad: alcohol [1]

Start	Material
	 Nutrition stress in cold weather, need 4000-6000 cal., 2-4 times normal [1] Fats 9 cal/g [1] slow release [1] margarine, nuts, peanut butter [1] Carbohydrates 4 cal/g [1] quick energy [1] dried fruit, bread, juice [1] Protein 4 cal/g [1] slower than carbs [1] meat, fish, peanut butter, dairy products [1] Tips pre-slice and pre-freeze what cannot be cut when frozen (e.g. Cheese) [1] test foods for how they are when frozen (e.g. Food bars) [1] trail mix good [1] snack containers that can be opened without removing mitts, gloves [1]
	 Monitor your physical condition and adjust quickly Do not overheat – sweating. [1]
	 Improvised shelter - practice tree pit snow cave [1] quinzee [1] Fire starting - practice [1]

Start	Material
	Hazardous situations
	• avalanches
	Avalanche Awareness course
	 many environments that look safe aren't
	• 36 degrees
	small slopes outside mountains
	• avoid risk
	Avalanche Tech evaluation
	• avalanche.ca
	• open slopes
	cross one at time
	• equipment
	shoveltransceiver
	transcerverprobe
	 probe party rescue vs. organized rescue
	 rescue leader
	 dog, scent, ditirus
	 transceiver search (all receive)
	 probe line
	• Ice
	 thickness, 4 inches – person, 5 inches – snowmobile [2]
	• self rescue
	• Don't remove your winter clothing [2]
	• Turn toward the direction you came [2]
	• Place your hands and arms on the unbroken surface. [2]
	freeze to surface
	• Kick your feet and dig in your ice picks to work your way back onto
	the solid ice [2]
	• Lie flat on the ice once you are out and roll away from the hole [2]
	• Get to a warm, dry, sheltered area [2]
	formal organized ice rescue course
	Spring snow storms
	multiple simultaneous rescues
	• Travel
	 most searches need the same method of access as the subject

Start	Material
	• Snowmobile
	flatland vs. mountain
	• fast, large range
	• principal problems: stuck (navigation/skill), stuck (storm), breakdown
	 expert level vs intermediate level searcher
	 require expert level for most stuck scenarios
	 most riders will over-report their skill level
	 search team limited to skill level of weakest member
	SAR snowmobile safety course trains to flatland only
	• Foot
	• snowboots
	 hiking boots, gaters
	 becomes unworkable in most situations of deep snow
	X-Country Skiis
	• types:
	Back Country
	• Touring (heals lock)
	• Telmark (heals don't lock)
	• skins
	• waxes, waxless
	fast downhill, glide on the level
	Snowshoes
	• surprisingly easy to use
	• floatation: depends on weight carried, size of shoe, dryness of snow
	• can be used in most any situation
	 slowest method – trudging speed
	side hills difficult

Aids:

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Frequently Asked Questions

Feedback:

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Reference Material:

- [1] FOG SAR Slides
- [2] http://www.dnr.state.mn.us/safety/ice/index.html

Notes:

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