

Mike Forsyth's ESSENTIAL ITEMS WINTER LIST for PNW non-technical, non-glacier winter day trips below 8,500 feet, including the Olympia Basic Snowshoeing field trip:

Winter mountaineering involves highly strenuous activity, which causes the body to produce heat and water vapor. The basic system of dress for winter mountaineers consists of a skin layer, usually synthetics based on polyester or polypropylene, which transports moisture away from the skin; an insulating layer, usually synthetic fleece or wool; and a wind layer, usually nylon, for protection against wind, snow and rain. The wind layer should be water-proof or water-resistant, but breathable, i.e., permeable by water vapor, such as Gore-tex or coated nylon, and should have zippers including underarm zippers for good ventilation. Often, wind and/or insulating layers will be carried in the pack while climbing, permitting better ventilation, and mountaineers will "layer up" before leaving timberline for summit or other exposed windy areas.

BOOTS: properly fitted, broken in and waterproofed. Insulated: either double leather, or pac-style felt liner, or hard plastic mountaineering boots, or "Mickey Mouse" boots. Ski boots, if skiing. Summer hiking boots made of split grain leather and nylon cloth or a single thickness of leather are not adequate for winter.

SNOWSHOES, Poles and gaiters.

SOCKS: lightweight wool or synthetic liners and heavy outer pair of (all or mostly) wool. Carry a spare pair. Socks can replace lost mittens.

HAT: for warmth and protection of head, including ears, from wind, sun, snow and rain. A woolen baseball-style cap and a balaclava are a good combination.

SHELL LAYER: JACKET: breathable waterproof nylon shell jacket, anorak or windbreaker, and WIND PANTS.

INSULATING LAYERS, such as sweater, heavy shirt, vest or pullover made of wool or synthetic fleece. Treated down may be okay. Untreated down absorbs water vapor from perspiration and loses its loft and insulating value.

MITTENS with separate wool or synthetic glove liners. If you wear ski-type gloves for dexterity, carry mittens with spare clothing.

OTHER CLOTHING: Down jacket, preferably hooded, to put on over other layers during rest or extended stops. Durable water-repellent coating is desirable. Put snacks in the pockets beforehand for convenient access during breaks. Balaclava, scarf, buff or "face-gaiter" to protect face from frostbite; shirt, pants and underwear: preferably silk, wool, nylon, polyester, polypropylene, Bergelene, Polartec, Thermax, Coolmax or other synthetic or blend. Cotton holds perspiration, gets wet, provides little insulation, and causes chilling. Save the jeans, flannel shirts and sweatshirts for changing into after the hike.

WATER BOTTLES: 2 one-quart water bottles which will be filled with boiling hot water before leaving home, tent or motel & carried wrapped in extra clothes (such as your spare socks or down jacket) in day pack or fully enclosed in a "water bottle parka" on your hip belt. Re-tighten lid a minute after filling with hot water. Okay to substitute a thermos of another hot beverage for some of it. Sports drink and water bottles in belt carriers with exposed tubes, lids, spouts, nozzles or nipples are OK for above-freezing use, not for winter trips.

FOOD: high energy with fat and sugar. Trail mix, nuts, dried fruit, chocolate, granola, etc. as well as lunch, ready to eat on the trail, such as cheese, salami, etc., cut into bite-sized pieces.

WHISTLE: One blast means "Where are you?". Two blasts mean "Here I am. I am OK." Three blasts mean "Here I am. I need help." Repeat as needed, waiting to hear response after each try.

PLASTIC BAG for all your trash. If you carry it in, carry it out.

TOILET PAPER. Or try snow instead.

SUNGLASSES, SUNSCREEN, LIP BALM, POCKET KNIFE, MAP & COMPASS

BIVVY SACK: Light-weight mylar, weighs 7 ounces and costs less than \$40. Or mylar space blanket; pocket-sized is adequate for emergencies. Open & re-fold when new, and annually thereafter.

FOAM PAD to sit on to eat lunch. May also be used as a splint for a fracture, or insulation for forced bivouac, e.g., non-ambulatory injury.

FIRST AID KIT: tape and/or moleskin (best applied to known blister-prone parts of feet before hike to prevent blisters), elastic ace bandage, band-aids.

LIGHTER or matches in waterproof container, and a second means of firestarting.

HEADLAMP with spare batteries (and bulb if not LED). "Day" hike is a misnomer, especially during northern winter months.

**Not needed for Basic Snowshoe Field Trip**, but maybe for other Basic trips:

Microspikes, instep (4 or 6 point) crampons or other traction aids may be worth carrying. Full (10- or 12-point) crampons may be needed on some routes. Adjust crampons to your boots at home before packing.

AVVY GEAR: Beacon, probe and shovel unless staying well clear of avalanche terrain.

COMMUNITY GEAR: On backcountry trips where evacuation may not be same day, it is prudent to carry at least one sleeping bag in the event of a non-ambulatory injury, which would be used with a few foam pads and a couple of space blankets and/or bivvy sack. A pot & backpacking stove might also be considered. Dividing and carrying these should be a shared group responsibility.