TYPES OF COLD

There are basically three types of cold: wet, dry, and Arctic-like. Each type of cold requires different clothing considerations. Know the type of cold you will encounter and prepare accordingly.

Wet-Cold – this is the most dangerous type of cold and it is the type of cold in which most winter camping is done. Wet-cold temperatures range from 50°F (10°C) to 14°F (-10°C). Wet-cold can occur with or without snow. During wet-cold conditions, temperature differences between the warmest time of the day and the coldest period at night may be as great as 30° or 40°F. The coldest temperature usually occurs about 1 hour before dawn, unless there is a strong frontal system affecting the weather. This wide temperature fluctuation causes melting during the day and a hard freeze at night. The cycle of freezing and thawing, often accompanied by rain or wet snow, causes the ground to become muddy or even slushy. Wet-cold clothing is designed to cope with these conditions.

HOW WEATHER AFFECTS HEAT LOSS

<u>Dry-Cold</u> – temperatures vary from 14°F (-10°C) to -20°F (-29°C). Dry cold is usually associated with snow conditions. During dry-cold conditions, the ground is usually frozen and the snow cover is relatively dry – in the form of small crystals. Strong winds cause the low temperatures to seem colder and increase the need for protecting the entire body. Dry-cold clothing is the same as for wet-cold conditions except that more insulating layers are added, and the rain protection needed in wet-cold conditions can be replaced by windproof outer clothing that is water repellent.

Arctic-Like Cold — with temperatures below -20°F (-29° C). Rarely, if ever, would you encounter temperatures this low without snow. Arctic-like cold requires the most insulation, especially when you are not active. During times of Arctic-like cold, many thermally formed materials (metals, plastics, etc.) change their physical properties, becoming brittle; they maybreak or shatter. Camping comfortably at these temperatures takes a great deal of experience. The correct layering of clothing is essential. The outer layer should be a windproof barrier that covers most of the body.