

# How to keep Warm in Winter Without a Campfire

by Laura and Guy Waterman

How high on the list of priorities should fire building be, even as an emergency tool?

Our answer: not very. A fire is a poor way to keep warm, fire-building uses up energy which you may need to perform important life-saving activities and could be harmful to the environment.

Almost everyone now agrees that campfires have lost their place in normal camping routine. If today's millions of backpackers all lit fires, the destruction of trees would be overwhelming.

But what about emergencies? The notion that starting a fire is the proper way to cope with an emergency is a psychological illusion which dies hard.

There *are* circumstances in which an emergency fire could save a life, no question about that. So it's probably desirable for backpackers to know how to build one. But building an emergency fire falls roughly into the same category as treating a snakebite or performing an emergency tracheotomy on the trail. Furthermore, like performing a tracheotomy with a pen knife, it has been done but should be undertaken only as a last resort and *not* be practiced in advance.

The backpacker who aspires to serious winter hiking ought to be taught more generally useful skills than fire building for surviving unexpected cold weather. Some of these skills:

- how to build a snow cave, and what constitutes a minimum effective bivouac cave for surviving one night;
- effective use of compass, both with and without map;

- what emergency gear to pack for each type of trip;

- the uses and limitations of space blankets, bivouac sacks and elephants' feet;

- knowledge of advanced first aid and mountain medicine;

- how to recognize frostbite and hypothermia, and techniques for dealing with them;

- most important of all—how to minimize the risk of having an overnight emergency arise in the first place. This involves everything from prudent trip planning to weather-judging wisdom, avalanche-risk calculation and mountaineering skills learned from other people.

Why is fire building of so little use? There are several reasons:

1. If getting warm is essential, starting a fire will be little help. An outdoor fire is an extremely inefficient source of heat, even for the one side of you that gets any warmth. Great quantities of fuel are required to produce a negligible amount of BTUs.

2. The modern backpacker almost always carries a down sleeping bag, and he's much better off inside it than out. Inside, the considerable heat his own body generates is retained.

3. If the backpacker gets a fire going, he should then get into his bag, anyway. Once inside it, how could he tend a fire effectively?

4. If hot food is the backpacker's greatest need, he should use his cookstove.

5. If above treeline, firebuilding is a useless art because there will be no burnable materials at hand.

6. Most emergencies where fires are alleged to be needed occur in winter situations. If you start a fire on a six-foot snow cover, you'll soon have a pit several feet deep with the fire at the bottom, where it will furnish no heat but plenty of smoke. It's not easy to cook a meal way down there, either.

7. If a backpacker has the energy, tools and daylight to amass many large logs to construct a fire platform in the snow, he should probably use his time and energy instead to do something of more lasting benefit—like walking out.

If you should be caught in an emergency without tent, sleeping bag or stove, you *might* want to try to get a fire going. But you would probably be better off using the natural protection of deep snow by digging a snow cave, conditions permitting, or by burrowing under a blow-down where natural caves can occur. Minimize the possibility of frostbite or hypothermia by keeping active, if possible; by loosening boots or crampon straps to keep circulation going; and by being rigorously watchful that no snow gets between you and your clothing; where it would melt.

One of the authors was once caught in a somewhat desperate situation at 35 degrees below zero with winds strong enough to knock him over. When camp was finally established, there was a difficult struggle to keep a Svea stove going long enough to melt snow to supply badly needed hot liquids. He recalls that the idea of getting out of his down bag long enough to start a fire would have been patently absurd.