WINTER SURVIVAL SHELTERS

By Dave Hall with Jon Ulrich

Photos provided by author

Winter is my favorite time of the year. As an outdoorsman, I find that the quiet of the woods, the absence of insects, and the challenge that colder temperatures bring make this my season of choice. I've been practicing primitive survival skills for the last quarter century, and much of that time has been spent in the Northeastern United States during the most unforgiving months of the year.

Born out of my desire to build expertise in the pursuit of winter preparedness, years ago my friends, colleagues and I began putting our skills to the test. In doing so, it became clear that there was a dearth of reliable knowledge on cold-weather camping.

Most of the information I found in print was either lacking in depth or was a rehashing of untested lore. Soon, a passion was brought to bear: the yearning to discover and master the tenets of winter survival. And because the nature of my studies was experiential, there was only one way to learn—by doing.

My journey began in the mid-'90s with the simple act of building a snow shelter. This prototype, it turns out, was too small—it dripped, was structurally inadequate, and otherwise begged for all manner of improvements—but the experience served to fuel my ambitions. I wanted to improve my skills to the point that someday, with aplomb, I would be able to spend a night outdoors with minimal gear in any cold-weather situation.

I continued to assess the information available and improve on my areas of weakness, in turn creating new solutions when I wasn't satisfied with the results. Snow shelters are an iconic symbol of winter survival, and for good reason—anyone who is ill-prepared for an unexpected winter's night out is setting the stage for a dangerous and potentially disastrous outcome.

Hypothermia is a real danger for people enjoying outdoor adventures in winter, and because of its insidious nature, shelter is of paramount importance. Mother Nature is an indifferent force; she doesn't care that you've forgotten to bring along proper attire or matches to ensure warmth. But she is noble in her generosity, providing the patient and learned outdoorsman all the resources necessary to ensure survival.

A properly built snow shelter is an excellent investment of time and energy; it offers the itinerant survivalist an option for which there is no substitute. A shelter of sound design will not only insulate, but offer accommodations superior to the finest winter tent. With outdoor temperatures well below the freezing mark, a well-constructed shelter will maintain a comfortable interior climate that can reach as high as forty degrees Fahrenheit. This, coupled with a quiet, windless space, makes for the most agreeable of lodgings.

My shelter of choice when working with powdery snow is what I call the snow tepee. This is an improvement on the traditional quinzee (a classic North Country shelter) in that it utilizes downed beams to provide a strong, internal framework. (The quinzee, by contrast, comprises nothing more than an excavated pile of snow.)

Begin by erecting a tripod of poles, roughly three to four inches in diameter. These will serve as the groundwork against which you will buttress more poles to create a tepee-style frame. Keep in mind that the interior of your shelter will ultimately be smaller than the frame. Size your shelter so that it is large enough to provide for your needs, but no bigger. Remember, small is beautiful.

Next, shovel snow into the interior of this space, filling it to capacity and covering the beams to a depth of one foot. As you do so, be sure to coat the apex of the beams (where they interlock) with snow as well.

Once this is complete, the snow tepee needs to sit for a period of one hour. This will enable the once-powdery snow to sinter into a solid mass which can then be excavated. In the interim, take the time to collect materials—downed beams, leaf litter, grasses, and branches—that can be used for bedding. If time is limited, simply keeping yourself off of the shelter's snow covered-floor will be enough to meet your immediate needs.

Time and resources will dictate your course of action. For example, fields with available grasses offer excellent bedding, while hardwood forests offer beams and branches but have comparatively little when it comes to insulating vegetation.

Once you deem your shelter suitable for excavation, begin by choosing a wide space between two beams for your entrance. (I do this ahead of time by marking my desired location with a stick.) Remember that your excavation spot will need to be large enough to accommodate shoveling. Once the interior is complete, this entryway can be made smaller if necessary.

While excavating, aim for a dome-shaped interior. This smooth, rounded nucleus offers a multitude of benefits—in addition to minimizing environmental impact by using only snow and downed beams, it will ensure that any melting that occurs will run down the walls and onto the floor (as opposed to dripping on your person). As you hollow out the core of your shelter, you'll run into the edges of your structural beams. You needn't worry—this won't impact the shelter's structural integrity.

Grasses make excellent bedding material in a pinch.

To close your door, simply use blocks of snow cut during the excavation process. When it's time to turn in, place these inside the mouth of your entrance and wall off your opening, remembering to leave a small space for ventilation.

Excavating the inside of a winter shelter.

The snow tepee is but one of many attractive shelter options. Because weather conditions, precipitation, time, and resources will determine what you do, flexibility and creativity are indispensable qualities when working with snow. One vital question to ask when thinking about winter survival is, "What kind of shelter can I make given the type of snow and available resources?" Keeping this in mind will help ensure the most desirable outcome.

While learning primitive survival skills for winter can enhance your self-confidence and foster a more meaningful connection with your environment, it can also be a life saver when things don't go as planned. Knowing how to build a snow shelter is just one key skill. Outdoor adventurers would also benefit from learning other skills, including fire making, water purification, wild crafting, and edible botany.

In the end, the greater your depth of knowledge and experience, the better prepared you'll be for safely enjoying New York's wilderness during winter.

Dave Hall and **Jon Ulrich** are the authors of *Winter in the Wilderness: A Field Guide to Primitive Survival Skills*, available from Comstock Publishing Associates, an imprint of Cornell University Press. To obtain the book, visit **www.cornellpress.cornell.edu**. To learn more about the authors, check out their websites **davehallprimitive.com** and **fingerlakesnaturalist.wordpress.com**.

Winter Wilderness Safety Tips

If you are thinking of trying something new this winter, I suggest following these guidelines to make sure your adventure is fun and safe:

Get to know an accomplished winter outdoor enthusiast. Learning first-hand from a seasoned professional is an invaluable experience.

Dress in wool and synthetic layers. Doing so enables you to avoid sweating by shedding these layers when necessary. The last thing you want to be in a cold-weather situation is wet. Breathable and waterproof outer layers will help shed snow, wick moisture, and otherwise ensure protection from the elements. Be sure to have a warm hat and a means of protecting your face (balaclava or neck warmer) as well.

Wear boots that are designed to perform well for the chosen activity. These boots should have removable liners which can be dried and warmed by a fire if necessary.

Choose mittens that will withstand the task of branch collecting. I prefer a glove sheathed by a waxed, insulated leather mitten.

Carry at least three manmade methods of making fire and become proficient in their use. Under certain conditions, fire may be your only refuge from the threats of hypothermia or frostbite.

Stay close to home at first, gradually distancing yourself from civilization once your confidence and skills improve. I recommend building a snow tepee in your backyard so that in the event things don't go as planned, you can retreat to the comfort and safety of your home and try again another day.

Keep an eye on the weather and bring along gear that will complement your needs. For example, when I'm in the High Peaks of the Adirondacks during the winter season, I often pack a sleeping bag, sleeping pad, and bivy sack to provide warmth for other hikers. I also bring a small stove and extra food. This may seem excessive, but it can make all the difference in the world if a person in my party needs help or we come across someone in need.

I also recommend carrying a "heat sheet" (survival blanket).