

## Winter Survival

Survival situations that arise in winter are, in some respects, no different than those found any other time of the year. In the north, colder temperatures and the possibility of snow can magnify the risks involved and accelerate the need for adequate shelter, a source of heat, and an adequate and safe water supply. The desirability of an early rescue is also higher in cold conditions.

As in all survival situations, I see the elements of your survival in the acronym S.A.F.E. which stands for Skills, Awareness, Fitness, and Equipment. This paper will focus mostly on Skills and Equipment. Someone reasonably fit physically has a good chance of survival with proper skills training and some equipment. Awareness will be touched upon along the way beginning with the statement that the higher your degree of awareness, the less chance you will be in a survival situation in the first place.

Perhaps we should offer some definition of what constitutes a survival situation. For myself, if I am in a situation that threatens my life in some way and I am cut off from those things that customarily keep me safe and protected, I would consider it a survival situation. If I have everything I need at the moment (say, my camping gear) but there is uncertainty about my ability to return "home" (lost, snowed in, injured, etc) without assistance, I would consider it a survival situation.

What do you need to survive? That question can be addressed by introducing  
The Rule of 3s

1. 3 seconds without thought
2. 3 minutes without air (or without stopping severe bleeding)
3. 3 hours without shelter (and/or warmth)
4. 3 days without water
5. 3 weeks without food
6. 3 months without hope (love)

Some explanation can be added. Three seconds without thought refers to not doing something without thinking it through that makes a bad situation an impossible one. Occasionally "clearing your head" or meditating can be a very good thing to do. Walking a log across a rock strewn ravine without considering the possibility that the log is rotten and will break under your weight, sending your body crashing onto those rocks, leaving you with a concussion and a shattered leg, will probably result in your death. Falling through the ice and not being able to find the hole you fell through to get your head above water may be fatal unless you can find that hole in less than 3 minutes. Cut your femoral artery with a mishandled knife or axe and you have just a few minutes to stop the bleeding or say goodbye. In harsh conditions, if your clothing is inadequate, you have a few hours to find shelter or a source of heat or hypothermia will be your downfall. (If you succeed in getting out of the hole you fell through and to solid ice, if it is cold (duh!) and especially if it is windy you may have considerably less than 3 hours to deal with your soaked clothing and dangerously cold body.)

Our bodies lose water. Our skin gives off water vapor constantly. We lose water every time we exhale. We urinate. (Yes, even when it is bitter cold, we still have to go! If you are not, then you are not properly hydrated.) We have to replace that water. If we are minimizing our activity and comfortably warm (but not hot) we may last longer, but dehydration does two bad things before it finishes us off. First, it clouds our judgment...our brain doesn't always "think" right, thus

increasing the chance of rule #1 being broken. Second, it thickens our blood, making it harder for it to circulate and keep our bodies (especially hands and feet) warm.

We can last a long time without food. Small children may not make it the 3 weeks. People who are overweight may make it well beyond 3 weeks. Generally, if you are not well prepared something else will get you long before you starve to death. Yes, people have starved to death in survival situations. Generally, they did little or nothing to help anyone find them. More on that later. Here is a thought to consider: without food you will get progressively weaker making self rescue or even signaling to assist in your own rescue difficult. Lack of food and water in cold weather also increases the need for insulation or an external heat source.

The last one is based on the experiences of folks who have been in long term survival situations. Everything is going well...they have shelter, good water, have made fire and found food. Then, at about 3 months they hit a wall. They lose hope. They feel that the family they love has given up on them. And they give up and simply die. If you saw the movie *Castaway* with Tom Hanks, the role of "Wilson" was not comic relief. Wilson was essential for Hanks' character's survival.

So, the priorities in survival are (generally)

1. Shelter
2. Water
3. Fire
4. Food

But, that is not enough. There is another higher priority...your attitude. More specifically, it is your Positive Mental Attitude. When you climb down from your tree stand and can't find the trail back to your car and the reality that you are probably going to spend the night in the woods hits you, if you panic, you are in more trouble. If, instead, you can think, "Cool! I don't have to go to work in the morning!" then you have a positive attitude.

Right after "Attitude" we should add something about "first aid." Remember the 3 minutes without breathing? You could add to that 3 minutes without stopping severe bleeding. Also a minor cut that gets infected and results in blood poisoning could "get you" before the rescue team does. Take a basic first aid course, of course. But also take a wilderness first aid course too. And if you really want to be prepared, there are Wilderness First Responder classes and even EMT training to increase your chances of survival and of getting invited along on all kinds of grand outdoor adventures!

Another vital addition is "Signaling." Generally, it is on the list below fire. Chances are no one is looking for you right away anyhow. Take care of those things that are necessary to keep yourself alive first. Of course, having your whistle (oh my, our first survival kit item has just been mentioned!) handy just in case you see someone while you are gathering firewood is a really smart thing to do.

So, the expanded list looks something like this:

1. Positive Mental Attitude
2. Medical Care (maybe not just first aid)
3. Shelter
4. Water
5. Fire
6. Signaling (ALWAYS be ready to signal if help is sighted or heard)

## 7. Food

How do you deal with these?

You've taken a step toward Positive Attitude by taking the class and wading through this paper. It is only a step. Assembling a "survival kit," acquiring more skills through additional training, reading, and PRACTICE are all essential steps. Once you own some skills and some gear that you commit to always having with you, you really can let go of all the "if I don't blah, blah, blah, I'm gonna die!" and start thinking positively about what you need to do next to be OK. Use those skills, what you have with you (even if it isn't everything you'd LIKE to have), and what Nature provides and improvise your way to a successful adventure. Focus on the challenge and the adventure. No whining, no sniveling...not even any name calling about how you got (or who got you) into the situation. Focus on the learning exercise that awaits you. Be positive!!!

For First Aid/Medical assistance...get trained!!! Red Cross is good. A Wilderness First Aid class is better. Wilderness First Responder is even better. If you really enjoy this, go for EMT training!

### Shelter

Ah, now I have something to talk about in detail! Shelter begins with your clothing. What you choose to wear in the outdoors can have a tremendous impact on your chances of survival. First, remember that weather changes. Forecasts can be wrong. Certainly, check weather forecasts from a couple of sources before you leave (and check in with a weather radio along the way, if you brought one) but also check the weather for surrounding regions...storms can track 100s of miles from where a 3-day old forecast said they would go. Wear or have with you the clothing you will need to get you through the worst conditions you can reasonably expect to encounter. That means a small pack to haul the extra gear and to stuff the layers you take off as the day warms. (If you are hiking out to a stand, you are not going to want to wear all your warm clothes on the hike anyway.) Dealing with an unexpected thunderstorm in summer is a lot different than an unexpected 2 feet of snow followed by zero degree weather in winter.

Here is one of the few absolute rules I will give you: Do not wear cotton next to your skin. Period. In summer, maybe. In winter, early spring or fall, never. Remember the water vapor that your skin constantly gives off? Cotton will absorb it instead of passing it through and it will become damp. As it becomes damp, the fibers collapse, losing their insulating ability and leaving that wet, moist cotton clinging to your skin. On a hot summer day, it feels great as your body heat is lost as the water evaporates. In winter, that loss of precious body heat can kill you. Look for a good polyester fabric which will transport that moisture away quickly to the next layer. Patagonia's Capilene is one of the best (and one of the most expensive). Duofold is another brand with several products that work. Get a Campmor catalog and read the claims to your heart's content. Another option is wool. Yes wool! Not the itchy-scratchy long-johns of days gone by, but the soft stuff made with merino wool. It is expensive too but if you prefer "natural" to "plastic" this is the best way to go. It works differently than polyester, but it works! (A cheap solution for your top may be a used merino wool, or maybe even lambs wool, sweater from a thrift store. A few bucks vs. \$60 for Smartwool...hey! It's worth a try.) Speaking of "worth a try" for a next to the skin layer from the waist down, consider pantyhose. There are more "rugged outdoorsmen" who wear them in winter than will probably admit to it. Again, the thrift store may yield wool slacks, tights or whatever that are relatively inexpensive. Multiple layers of insulation with a windproof outer layer is what you want but you won't need quite as much insulation on your legs as you need on your upper body.

For the insulating layer(s) one, two or even three wool or polyester fleece layers may be needed. Why these instead of a nice puffy down or fiberfill coat? The big reason is the ability to remove or

add layers as weather conditions change. Second, if you are moving around, that puffy coat will get way too warm very quickly. As an additional layer, carried in your daypack, a light, compressible, down or (good) polyester fiberfill jacket or parka is great. To wear “on the march” so to speak, it will be too warm. Wool and polyester fleece (not cotton “fleece” sweatshirts, please!) both still insulate (some) when damp or wet. If they are soaked (remember when you “fell through the ice?”) and there is snow on the ground, rolling in the snow will draw much of the water out of the fabric, to the point you MAY be able to continue without having to build a fire or hurry back to camp for a complete change of clothes. I have not tried it, nor do I care to, deliberately or otherwise. I have seen a video of Mors Kochanski (a survival instructor of the boreal forest of Alberta Canada) submerge both feet through a hole in the ice while wearing 3 pairs of wool socks, leave them in long enough so they are saturated and then walk away through the snow, reporting the progressively greater “comfort” he was experiencing. (Air temperature was 0 degrees). Maybe I’ll try that test someday. It doesn’t work in slushy snow. It must be “dry” and powdery.

Next is the all-important wind shell. Wind is perhaps as much of a threat as moisture in the cold. “Wind chill” is recognition of just how damaging it can be. Your windproof layer can be nylon, polyester fabric or tightly woven cotton. (Here, the cotton is far enough away from your skin, it will not endanger you.) It should have a hood. It should not be waterproof. Having another waterproof layer available for wet-cold conditions is a good idea, but for just cold, you need a layer that breathes. Gore-Tex type products are supposed to do both. Your results may vary. Your head needs a hat under the hood of the wind shell. Fleece or wool is fine. The ears should be covered, but having the option to uncover them is good. Likewise, the ability to cover them while uncovering the head to avoid overheating is good too. The best combination I’ve found is a thin polyester balaclava which can be worn just as a cap, pulled down to cover head, neck and most of my face or adjusted to cover just my ears and forehead (ok, part of my forehead!), coupled with a fleece cap that is big enough to go over it, covering my head and ears.

For your feet, it is wool socks, wool socks and more wool socks. Wear a polyester, polypropylene or nylon liner under the wool if it bothers you against your skin. Don’t even think about a cotton sock. Insulated boots, breathable in deep cold, waterproof in wet cold, big enough to fit your feet while wearing at least 2 pair of wool socks will keep your feet safe. They will at times be cold, no doubt. The secret is having room for lots of socks and keeping everything dry.

If you are hunting, your outer layer will be colored to be consistent with legal requirements and your desire to be seen (or not seen, as the case may be). While Fall and Spring are prime hunting times, they are not immune from the dangers of hypothermia. The temperature extremes may not be as great, but hypothermia can set in with air temperatures in the 50’s. Layers and staying dry are still the keys to survival.

OK, what about the dreaded “night in the woods.” I don’t make light of that. Even if you are an experienced camper (and especially if you are not) the thought of spending an unexpected night in the woods, alone, without camping gear can be more than a little intimidating. Get past that and seek the adventure. There are many shelters you can build that will keep you “warm and cozy,” relatively speaking. We will discuss some of them in a bit. They have one thing in common: the better the shelter, the more time it takes to build it. When you need shelter beyond your clothing, think first of natural shelters. Look for places that are out of the wind. Dense stands of evergreens make good windbreaks and offer a bit of insulation. Caves, overhangs, etc., get mixed reviews. The better they are, the bigger the chance something lives there already. Read the signs to see who is there. Often some type of fire may be needed to make the place hospitable. (If it is 0 degrees, those

rocks are 0 degrees to start with. If you are the only source of heat to warm them up, you will have a cold shelter. Low overhangs or small caves of sandstone and fire are not a desirable combination.

Why not look in your day pack and see what you've brought for shelter. A couple of sturdy plastic trash bags (construction site cleanup bags of 3 mil plastic are great...better if you can find them in orange to make them easier to see than basic black) are a good start. If you can find leaves to fill the bags, you can use them as blankets. You might even crawl in with the leaves. The bags could be opened at the ends and a cord (Parachute cord is the best stuff to find in your pack) run through them and attached to two trees makes a little "A" frame that could hold some leaves for insulation. If rain is an issue, perhaps opening one up as a small tarp would be best or even cutting a hole along one edge, about 6" from a bottom corner to make a "poncho" might work. (This way your head is covered as you peer out the side.) One of those "blue" plastic tarps (which might be green, silver or brown) could offer some much needed protection. (Blue is fairly visible in winter...orange would be better.) Then there are the reflectors. The Adventure Medical Kit "Heatsheet" products are worth their weight, whether a simple tarp or the bivy sack style. They offer wind, rain, and snow protection while reflecting about 90 per cent of your radiant body heat back to you. Dampness can be a bit of an issue, but the heat gain is worth the slight buildup of moisture within your insulation. If you didn't listen and are still wearing cotton next to your skin, you will feel that dampness even more and will not be as "comfortable" as you otherwise would be. If you have brought a small (even summer weight) sleeping bag to crawl into and then get into the bivy or wrap up in the Heatsheet and you've found a place out of the wind, you may be able to get some sleep IF you've put some insulation under you. It might be asking too much for you to have brought a foam pad. If you didn't and you can find some pine, fir or spruce boughs, cut a bunch for a mattress. (Don't do this for practice, please.) Make sure the cut or broken ends are pointed down or they will rip your bedding if not your skin. If you don't have any of those goodies along and it is getting too dark to build a shelter, spend your time gathering the driest wood you can find. Lots of it. You are going to need a small fire and will need to keep it going all night. If you can build a reflector on the far side of the fire (that can be some logs stacked up) and have something behind you to reflect the heat back at you, it will be a little warmer. If you have just a Heatsheet, wrapping it behind you but spreading it out with your arms or sticks beside you as a reflector will send more of the heat of the fire your way. If you are part of a group and you can circle the fire this way, it can be quite cozy. If it is a group situation, it may be worth the effort to rig a structure around a fire that will reflect the heat inward as part of the group sleeps and one or two tend the fire, taking turns with that task.

With snow, you add options. Deep snow may leave a "hollow" beneath an evergreen. With some additional boughs to sit on and some placed to seal the wind out a little better, you may have a cozy place to snooze. Lacking that, a body-size depression dug or stomped in the snow, then lined with boughs, grass, weeds etc. gives a place to lay down. Placing some sticks across the depression and then piling more boughs or debris on top adds insulation above you. A small tarp or reflective blanket placed over them will seal out drafts and afford you the possibility of sleeping. A full blown snow cave is a lot of work. If you tackle this, be prepared to shed layers. Don't break a sweat. As with any snow shelter, choose your sight carefully. In the west avalanches are a real danger. And if your sight doesn't look like a road, but really is one, it is a blueprint for tragedy.

The "Debris Hut" is an excellent shelter, where materials (wood and leaves or grass or weeds etc. are available). A ridge pole, maybe 10' long, with one end on the ground and the other no higher than your upper thigh. Support that end by lashing it to a tree or to two sticks making a tripod with one long leg or locking it in place with forked sticks. Build a framework by laying sticks on both sides making a little cave. Do not allow those sticks to extend more than an inch or two above the ridge pole. Maybe lay some thin branches laterally to help support the debris you will pile on next.

Add 2, 3, even 4 feet of leaves, grass, etc over the entire surface, saving the softest and driest to stuff inside. Lay some additional light sticks on top to stabilize it in the wind. Crawl inside, pack some leave under you and plug the door with additional leaves. Sleep.

Once you've made it through the night, begin to assess what you should do next. If someone will be looking for you (are you overdue? You did tell two responsible people where you were going and when you would be back, didn't you???) that day, begin creating some signals that can be seen. If it is safe to build a fire (I should have put that warning in about last night's fire too, if you had one...Never light a fire unless you are certain you can control it. Typically winter is not a prime fire time, but some winters are cold, dry and snowless and the dry fall leaves coupled with some wind can be a catastrophic combination.) find an open, safe, area and kindle a good sized one. Add some green stuff to generate smoke every so often and any time you hear a low flying plane or think you hear voices. If you think searchers may already be in the area on foot, bring out your plastic whistle and periodically (every few minutes) give it 3 good blasts, then listen for any response. If there is snow, tramp out a big X in a clearing or if you are really into it, go for an SOS. You can make either out of stones or anything else that creates a contrast or shadows. Keep the fire going, and have a stack of green stuff to throw on if you hear a plane. If your Heatsheet has an orange panel on the silver background, you might spread it out to attract more attention from the air, just make sure it isn't damaged. You may need it another night or two. If you aren't expected back for a few days, don't knock yourself out signaling if there is little chance of anyone being in your area. (If it is hunting season in Ohio, chances are someone will be in your area!) If you are hunting (with a firearm, this doesn't seem to work well for bow hunters) firing 3 shots may attract attention...if your timing is right. A few volleys of three spaced out just after legal hunting time just might attract the needed attention.

Well, somehow I transitioned into signaling before writing about water. Maybe it is because thinking up and doing all the neat things you can do to attract attention is so much fun. Let's pour out some ideas about water. We've already established that you need it. You should have brought a couple of quarts with you, at least but you probably drank them. If you have snow and a fire all you need is something to put the water in to melt it and you've got it made. Maybe. It is best to have a metal cup or pot to pack full of snow (ice contains more water for a given volume) and it is best to go ahead and boil it to make sure any nasties bite the dust instead of biting your insides. Many will say that fresh snow is quite pure and need only be melted and warmed. I used to buy into that and then one snowy day, I was listening to the joyous chatter of the chickadees and it hit me (not literally, thankfully) that most bird droppings are white... I think I will choose to boil the water after it is melted. It doesn't take a \$50 titanium pot; a good metal coffee can will work. (If painted, burn the paint off first and drill some holes near the top for a wire bail to hang it over your fire.) Many cans today have a plastic coating on the inside that really should be removed before use. Between boiling and scouring, it will go away. Give the can a light coating of oil (vegetable or olive, not motor) inside and out, reheat a time or two to "season" it and you will have a cooking vessel that will last a surprisingly long time. Taking one of your large black trash bags, putting a bunch of snow in it and hanging it near (but not too near) a fire will melt snow rather quickly. A small hole at the lowest point and a container under it to catch the drips will produce a decent supply of water. Again, it should be boiled before drinking. Chemical treatment is a slow process in cold weather. Pump filters have a tendency to freeze up in severe cold. If there is no snow, look for small steams (or large ones) in the low places. Do as much looking as you can without a lot of walking. Conserve energy. Ponds, puddles, icicles on hillsides or rocks all are potential water sources. Look before you walk whenever possible.

One more thought on signaling: mirrors. A mirror as part of a compass will work. An “official” signaling mirror will work. An old CD (that is silver) will work-but not as well as a real mirror. Put a mirror in your kit but spend some time practicing with it. If it is sunny, and there is no “target” in sight (plane, person, vehicle, etc) randomly flashing the horizons takes little energy and can alleviate boredom and might attract some attention. When there is a “target,” being able to direct the flashes to that target is vital. This requires practice. Try using your thumb as a front sight. Looking over the mirror while holding your thumb just below a pretend target (trees at progressively greater distances) and flashing the sun’s light on and just above your thumb is what you need to do. See where the reflected light actually goes. Work until you find a placement so that you can reliably direct the light where you need it. And if you are signaling to a plane and the pilot sees you, the pilot will rock the plane “waving” its wings to acknowledge you. You can stop signaling. Continuing will annoy the pilot!

Now a little bit about fire. We’ve kind of casually written about building fires as if there is not much to it. OH, if it were always that easy. With some dry tinder and kindling and a good heat source, it is. Getting that dry stuff isn’t always so easy. If it is really easy to get, maybe woods are too dry to safely build a fire. Often, dry twigs and branches can be found at the bottom of evergreen trees. A big handful or small armful of dead spruce or pine twigs can produce a lot of heat to get a hardwood fire going. If everything seems soaked, the only dry wood may be inside larger pieces of wet wood. Getting it out takes an axe or, perhaps, a good fixed blade knife and another stick to use as a baton (or “thumper” as I call them). What is a “good fixed blade knife?” That is at least 2 more pages. “Mora” knives (Mora of Sweden which is the successor to Frosts and Eriksson knives of Mora (a town in Sweden)) are inexpensive, will take some mild abuse and are a good starter or back-up knife. Beyond that, most of my favorites have been discontinued by their manufacturers. [note to self: if this is mentioned in class suppress tears and sobbing!] If I had to get another knife, I would hope to find a Cold Steel Master Hunter in Carbon V steel that someone didn’t want or maybe a Becker BK10. The Master Hunter is still out there in another steel. I don’t know how good it is, so hesitate to recommend it and I’m not going to buy one to try it. Look at the shape of its blade and you will see a very functional design. If you can find something similar in D2, A2 or 01 steel, consider it. There are new steels emerging seemingly every day. I can’t keep up. Chances are you will pay \$50 or more (and maybe much more) to get a knife that is significantly better than a \$12 Mora. There are a lot of people who would argue that point. The Mora isn’t a “pry bar” but it will shave a wicked good fuzz stick!! (My son is very happy with his Ontario RAT-3 knife, by the way.)

Back to fire...How are we going to light it. Matches are the “old” standby and work if you can keep them dry and the wind isn’t blowing much. “Lifeboat” matches are supposed to be the hottest thing going. Be careful...they can deteriorate. Then there are the butane lighters (Bics, et al). They provide lots of flames, if they are dry and not cold...and if there is no sand under the wheel. (beginning to see some problems here?) You can (maybe) get those methods to work quickly and well. We prefer any number of sparking devices coupled with cotton balls (or absorbent cotton) with a good amount of petroleum jelly (Vaseline to name one product). Put those twigs in a little tipi (or use the fuzz sticks you made with your sharp knife), take a little bit of the cotton out and strike a spark from your “ferrocium” rod (Boy Scout’s Hot Spark is a common small model; Spark-Lite is a wheel type version; the rods attached to any number of magnesium bars or rods will work; and the Strike Force and Blast Match may be the best of the bunch) and you have a good fire. (Carrying a piece of pine board 6 or 8” long can be a source of dry fuzz sticks when the woods are very wet.) For the most stubborn situations, a Trioxane bar lit with a spark can dry out some pretty damp stuff and assist with (but not assure) a sustainable fire.

## Vehicle Survival

Suppose, your adventure begins when you have a car, truck or SUV with you. (This is a surprisingly common occurrence.) Well, for starters, you have a good shelter that can be improved. And you have room for a lot more stuff than you had in that day pack! A full set of extra clothes; a good warm coat; blankets or sleeping bag(s); boots, reflective bivy; water; cook pot; maybe even a small stove are all welcome additions to your vehicle home. And, of course, who would leave home without a jump pack with compressor, jumper cables, duct tape, road flares, first aid kit, shovel, axe, saw, tow strap, high lift jack and board for a base, carpet scraps, tool kit, fire extinguisher, partridge in pear tree, weather radio, CB (or ham if qualified) radio, GPS system, spare tire, spare parts, just to name a few? All those things could contribute to your getting back on the road and on your way without the need for outside help. Choices. A truck might haul them all. A Mini Cooper won't. Stay with your vehicle. Add insulation (leaves, dried grass, pine needles) to the interior if you need to. Make it as visible from the air as possible. If no other mirror is available the driver's side mirror and the interior mirror (any on the sun visors?) can all be used to signal. The passenger side mirror isn't as good since it is slightly convex. For warmth, run the engine sparingly and only when the exhaust pipe is completely clear. It is not an efficient use of the fuel for heating but it may be the only safe way to use it. The better the vehicle is insulated, the more heat it will retain (yours and that from the engine). Again, the Heatsheets can be very useful for this, especially at night. During the day, if the sun is out, the greenhouse effect on the interior will make it almost cozy. Take advantage of that. While the engine is running, sounding the horn in groups of 3 blasts will add to your signaling options. At night, lights flashed in the SOS pattern short-short-short-long-long-long-short-short-short may attract some attention.

Oh, a 3# coffee can makes an acceptable pee can to have along too. It may be a little awkward, but it beats going in the snow when the wind is blowing! (Or when it is not, for that matter.)

And now a few words about what is often thought of as the number one priority but is really at the bottom of the list: food. Generally we say a healthy adult can live several weeks without food if they can keep their body temperature stable and have a source of safe water to drink. Generally this is true and often more energy is spent seeking food that is gained from the food that is obtained. In winter the pickings are pretty slim unless you have a way to harvest critters. There may be some "edible" tree barks available, if you can boil it a long time. As an interim measure, some food can be brought along. Energy bars are a possibility. So are nuts. Butter can be added to most anything you have to eat or drink. Peanut butter has a high calorie to volume ratio but it is subject to "freezing." Without any food, it takes about 24 hours for your body to start dipping into its reserves: fat first, then muscle. If you keep nibbling, you may actually have less calories available than if you ate nothing and let your body's "survival" mechanisms take over. You need to use some judgment about how long it will be until you are rescued or are able to move on your own to safety. If it looks as if it will be awhile, at least do some planning and observation of your options. Fish hooks, line and sinkers take little space in a kit and open the possibility of catching fish, if there is water and conditions permit. Watch for thin ice and slippery banks. This is not the time to join the "Polar Bear Club." Those hooks can also be used to catch some small game (illegal, of course...do not practice this skill) but you must be near by to dispatch the critter (be it winged or 4 footed) before the hook tears out. A few snares also take little space and may passively secure a rabbit, squirrel or such if you know where to place them. That is another class!

Suggested reading:

*Build the Perfect Survival Kit* by John D. McCann (All you may have ever wanted to know about survival kits. I have a handout for another class I do, *Outfitting for Survival* and this book is that handout on steroids!!!)

*98.6 Degrees, The art of keeping Your Ass Alive!* By Cody Lundin, In spite of the fact that Cody has found ways to insult or offend just about everyone someplace in this book, there is a lot of good information here. Again, it is survival kit based and focuses pretty heavily on the “everything will be OK within 72-hours” approach. *Backpacking* magazine described Cody as: Heavy Metal meets Abo-dude or something like that.

*Bushcraft* by Mors Kochanski Great collection of skills for the far north. He also has a series of videos and several pamphlets (16, I believe) that may offer more hard facts in less space than anything else I’ve read!

McCann’s book and Lundin’s book are standard book store fare. For Kochanski’s stuff try online at [www.karamat.com](http://www.karamat.com) (the website for the school he started) or [www.hollowtop.com](http://www.hollowtop.com) (Thomas Elpel’s site which has some of his own books and videos).

Another site to check out is [www.lifeviewoutdoors.com](http://www.lifeviewoutdoors.com) for its DVD *Prepared to Survive* and also offers a very complete line of *Adventure Medical Kits* “Heatsheet” products as well as their first aid kits at reasonable prices. Hint: With the 2 orders I placed with them for my own use and this class, I got 10% off coupons to use on my next order, generally good for a little less than 30 days. Place one order, then re-order for friends, family, gifts etc with the discount? I’ve been impressed with their product selection (they have much more than AMK stuff) and their service.

For wool blankets and military surplus clothing (wool etc.) I’ve been using [www.sportsmansguide.com](http://www.sportsmansguide.com) and [www.cheaperthandirt.com](http://www.cheaperthandirt.com). Shipping is getting a little ugly, but I’ve had decent results from both. There are many others.

A good source of sparking devices is [www.campingsurvival.com](http://www.campingsurvival.com) Good prices on all but the biggest “flints.”

I have found those at [www.epcamps.com](http://www.epcamps.com) but have not ordered from them so I can’t comment on their service.

To see the vast array of Scandinavian knives, check out [www.ragweedforge.com](http://www.ragweedforge.com). Prices are fair, service is outstanding and Ragnar seems to be an incredibly interesting person with an outstanding reputation for integrity. If you can find the “Mora” knives at a local dealer and save the shipping that is fine. If you have a reason to order several, Ragnar’s prices and shipping policy (flat \$6 unless you get into some of the bigger axes and such) will probably make him very competitive. It’s tough (but fair) to pay \$6 shipping for an \$9 knife but that is about a true cost. (If your local knife dealer doesn’t carry Mora knives, introduce them to Ragnar...he wholesales.)

Check out your local Goodwill, Volunteers of America, or whatever stores for used clothing.

In closing...have a plan. Have kits with you, in your home, in your vehicle. The concepts we’ve visited here can be applied in your own home (house or apartment) if you need to remain there with no heat or power. Choose a room to live in, below ground or with a wood stove or fireplace if possible. Insulate the walls and ceiling with mattresses, chair cushions, sheets...whatever you can find. Make some “nests” to sleep in. A 5 gallon plastic bucket, some plastic bags and a toilet seat take care of those basic needs. Any canned food is fair game but try to keep it from freezing. If your camp stove is your only means of cooking it is best to do it outside. Your propane or charcoal grill can also be used, but keep them outside. Read *Tom Brown’s Field Guide to City and Suburban Survival* for additional ideas on surviving in place.

Another interesting website, especially its forum, is [www.equipped.org](http://www.equipped.org). There are some knowledgeable people who contribute and some are otherwise. They generally get straightened out. If you visit, you will quickly pick up who makes the most sense. They are great proponents of Personal Locator Beacons (PLBs) as an essential (but very pricy) part of any kit. They are your best chance of getting found. In some messes you may find yourself in, they may be the ONLY way you will be found alive. It is something to consider in light of what your outdoor lifestyle is.

If you are still there, take a look at [www.coyotetrails.org](http://www.coyotetrails.org). Based in Oregon, with roots in Ohio, this program for children of all ages (family participation, including multi-generation families is encouraged) offers a refreshing approach to primitive living skills. Weekend classes are usually offered in Ohio in the Spring and Fall. Check the website for details, or contact me...they usually keep me "in the loop."

The Great Outdoors in winter is an experience but one that too many pass up out of fear. Skills, built with practice and experience coupled with whatever is "necessary" gear for you, allow you to overcome that fear. Having a healthy respect for Nature and her power is essential in winter. Sometimes the beginner places the line between confidence and foolishness in the wrong place. If a tent, sleeping bag and pad are essential for your survival, then make sure you have them...always. If you've worked your way to being comfortable with a knife, blanket, and metal can, good for you. Just don't overestimate your ability. Nature in winter can be unforgiving.

Thank you for your interest. We hope we have given you something to build on...Practice, Practice, Practice!

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Prepared by John B and his friend Walking Crow for the "Women of Winter" program, February 2007

Any outdoor adventure involves risk. Neither John, nor Greg, nor Walking Crow can guarantee that either the class or this handout will get you out of any particular mess you find yourself in. The more you have practiced, the better your chances. Build your skills but also build your kits. As you practice, remember that injury or illness may greatly reduce your strength, mobility or mental clarity. If you lack the mobility to collect wood, or build a shelter, you had better be able to pull everything out of your pack that you will need or have a companion with you who cares enough about you to share their gear and fire and/or to build a shelter for you to retain your body heat. If you are solo with a hurt arm or leg, hope that one of the things in your kit is a PLB or a cell phone that has signal. And above all else...maintain that positive attitude...the will to survive...the drive to survive!