Winter Survival for Real Life

by Ben Kruser

For winter camping, we plan and run programs designed to teach our kids about surviving outdoors in the great Canadian winter. Scouting’s outdoor training goal, however, is to give Scouts knowledge, skill, and self-confidence to cope with real life problems. There’s no doubt we need to know how to handle winter emergency situations, as these true cases illustrate.

1. An older couple, dressed in the kind of festive clothing commonly worn at formal family gatherings, were driving home late at night over the winter holidays. Along an empty road, the car hit some black ice and spun out into a deep snow-filled ditch. With an outside temperature of -40 degrees C, engine and exhaust choked with snow, and no shovel, blankets, boots, or winter survival knowledge, the couple froze to death by morning.

2. An RCMP officer became trapped in his car during a blizzard. Three days later, the snowplow crew reached him, a bit cold but very alive. He had used his winter survival knowledge to prepare his car with extra blankets and clothes. His first aid kit included food and a candle and can that kept his body and the car interior warm. When the candle was gone, he burned pieces of the car’s interior until it was almost gone. But he lived.

If you run out to the car without wearing hat or boots at meeting’s end in winter, imagine getting stuck on the way home. Given how you are dressed and what you have in your car, could you deal with the cold? How well do you think your Scouts could adapt camping skills to real life problems?

Here are some program ideas you might try to help them apply their winter camping preparedness to daily winter living.

PREPARE THE CAR

The major medical concerns for a person stranded in a car are frostbite, hypothermia, and carbon monoxide poisoning. In bad winter weather along the road, it is possible to come across a stranded car with passengers suffering one of these problems. What are the signs or symptoms of each? What treatment would Scouts give? This is an excellent time for a first aid review.

Survival Kit
Every family car should be equipped with a winter survival kit kept inside the driving compartment (the trunk may be frozen shut when you need it). Have Scouts make one for their car. The components are the same as those they would include for winter camping.

- a 48 hour heat source, preferably non-volatile fuel. A couple of large candles stored in a large juice can are simple but effective.
- a box of wooden matches, large size
- high calorie, nonperishable foods (hard candy, granola bars, hot chocolate, tea)
- a cooking and snow-melting container (old pot)

In the car trunk, you can keep bulkier items such as extra blankets or sleeping bag, hat, mittens, socks and winter boots. If you are planning a long trip where help might be far away, pack along winter ski pants or a snowmobile suit and parka.

Winter Car Equipment
Just as you prepare yourself with special equipment for winter emergencies, you need to prepare your car. Have Scouts check over their family car for:

- a second set of keys wired to the car’s exterior. Trying to find keys you’ve dropped in a snow bank can lead to serious trouble. Being locked outside your car on a deserted road in -40 degrees C is deadly.
- a general first aid kit
- booster cables, 2.4 m minimum
- spare fuses
- extra gas line antifreeze
- flares or reflectors (practise lighting one)
- windshield scraper and brush (never be a “peep hole” driver)
- a sturdy shovel (buy a good metal one)
- a tow chain or rope with chain ends
- hand tools such as pliers, crescent wrench, screw drivers
- a flashlight (store in your winter coat in the house, not in the car)
- a properly inflated spare tire (Check! Tire pressure drops 1 lb. per square inch for every 10 degrees F drop in temperature)
- “X” wheel wrench
- a tripod jack (single leg jacks are unstable on ice)
- sand bags for traction on ice and weight in the trunk of rear-wheel drive cars for better grip and stability

Car Check-Up
Car failure is far more likely in cold weather and the consequences more serious. Show Scouts how to check over a car.

Battery: The first cold snap will kill a weak battery. Check the cables for good connections. Look into installing a winter battery jacket to keep the battery warm on subzero nights.

Brakes: Under icy conditions, worn or unadjusted brakes that pull to one side can throw you into a skid. Have them serviced at the first sign of problems.

Cooling System: Antifreeze safe to at least -40 degrees C is recommended. Tighten all belts and hose clamps. If your car heater takes time to produce heat, look into installing a winter radiator thermostat, which makes the cooling system run hotter.

Windshield: Install winter wipers and winterize the washer system with antifreeze solvent. Keep the defroster free from blockage.

Engine: Ensure all filters are clean, especially the fuel filters (to avoid line blockage).
Gas Tank: The air sucked into the tank as fuel is used contains water vapor, which condenses and freezes to form slush. Adding gas line antifreeze (methyl hydrate) regularly and keeping the tank more than half full will help prevent frozen gas lines. You should definitely use gas line antifreeze when you find ice crystals on the inside of the gas cap.

Exhaust System: Any exhaust system leak can let carbon monoxide (CO) into the passenger compartment. This is a critical concern in winter because we keep windows closed. Learn to recognize CO poisoning symptoms (nausea, headache, drowsiness) and repair any leaks.

Tires: Install winter tires for optimum traction. Although they provide better traction than regular tires, summer radials are not considered adequate for winter driving. Radial tires can not be mixed with conventional tires without causing highly unstable handling. Tire shops and garages frequently overtightly wheel lugnuts. Make certain that all possible drivers are able to remove the wheel nuts with the tools in the car. If you carry chains, make sure they fit your winter tires. (Take it from me, I know.)

Miscellaneous Tips:
- You can open frozen locks by heating the key or using a pocket de-icer (carry in your coat).
- Clean the defroster intakes (louvres at the base of the windshield) to avoid sucking in snow that will cause icing on inside windows.
- If you get stuck, remain calm. Don't exert yourself or stay outside too long. Work slowly and methodically to avoid cold or other injury, like heart attack.
- Check weather forecasts before leaving on long trips.
- Let people know when you are leaving, when you expect to arrive, and what route you'll be taking in case someone has to go looking for you.
- A flooded car engine has too much fuel and not enough air. Remove the air filter cover and prop open the carburetor's butterfly valve with a screwdriver while you start the car engine. Otherwise, wait patiently.

Scouting & National Search and Rescue

by Ben Kruser

In 1984, Canada experienced perhaps its worst marine disaster when the oil platform Ocean Ranger was lost. As a result of lessons learned about the need for greater search and rescue coordination, the federal government formed the National Search and Rescue Secretariat in 1986. The Secretariat seeks to coordinate the resources of the Department of National Defence, whose minister is the government spokesperson for search and rescue matters, with Transport Canada (Canadian Coast Guard), the Department of Fisheries and Oceans, and the RCMP.

Several recent search and rescue initiatives have many potential benefits for Scouts and other users of the outdoors. One of the most exciting developments is an expanded use of satellite tracking and location finding capabilities.

Most of us have read news stories about how a crashed plane is located by the plane's Emergency Locator Transmitter. At sea, vessels are equipped with Emergency Position Indicating Radio Beacons. Now, Personal Locator Beacons (PLBs) are becoming commercially available for hikers and campers.

Imagine being disabled while out in a wilderness area. By activating your PLB, you send a radio signal to one of four Search and Rescue Satellite Aid Tracking Satellites, known as SARSAT. In partnership with the Soviet Union's equivalent COSPAS system, the satellites will be able to provide you a quick search and rescue response.

Scouts Canada's program services have held discussions with the coordination officer at the National Search and Rescue Secretariat. Together, they are looking at ways to educate the public and outdoor users through innovative youth programs. Scouting hopes it can help provide input to the development of such materials.

The National Search and Rescue Secretariat also maintains liaison with provincial agencies, such as the Search and Rescue Society of British Columbia (SARBC). This organization provides excellent resources for B.C. outdoors users.

Scouters or Scout councils interested in pursuing search and rescue programs right now can contact a local branch of the RCMP, Coast Guard or known agencies like SARBC. The National Search and Rescue Secretariat can also provide resource contacts, along with brochures on COSPAS-SARSAT and stick-on Search and Rescue logos. Write to National Search & Rescue Secretariat, 17th Floor, 365 Laurier Ave. W., Ottawa, Ontario K1A 0K2; telephone (613) 992-0063.