SURVIVORMAN HIKE

Part II: Shelters

by Bob Loney

If you are lucky, your youth group has never been in the backcountry where they've actually felt their survival was at stake. If ever faced with such a situation, it would be nice to think that the skills they've practiced in Scouting would help them survive until help arrives.

1st Bedford Scouts working on a garbage bag lean-to.

Photo: Scouter Song Lee

Staying calm and staying put is the first step to survival. The second step is establishing shelter and fire. This month we look at shelters. While there are many types of shelters that can be made, some work better than others, some are better in special situations and some just aren't worth the effort. Youth love building shelters in the outdoors — it's a great weekend adventure. Practicing these survivor techniques (even ones that aren't successful) will provide your Scouts and Venturers with insight to as to what would work best for them in a real survival situation. *(Adapted from http://www.wilderness-survival.net/shelters-2.php)*

Natural Shelters

These take the least time and energy to make, so are your first choice. Caves, rocky crevices, clumps of bushes, small depressions, large rocks, large trees with low-hanging limbs, and stable fallen trees with thick branches can work. Stay away from low ground such as ravines, valleys or creek beds. Low areas collect the heavy cold air at night and water when it rains. Thick, brushy, low ground also harbors more insects. Watch for poisonous snakes, ticks, mites, and ants. Avoid loose rocks, dead limbs or other natural growth than could fall on your shelter. Don't stray too far from where you are in an attempt to find natural shelter. Remember the first survivor strategy — Stay Put!

Lean-To Made from a Poncho, Garbage Bag or Tarp (Figure 1)

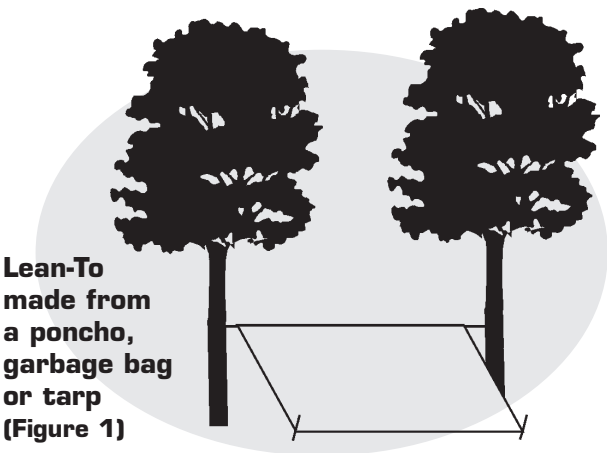
This is a reasonable shelter when it's raining, there's low wind and it's relatively warm out.

Equipment:

- ☐ Poncho, small tarp or extra large orange garbage bag
- ☐ 2 to 3 metres of rope/fishing line/cord
- ☐ Three 30 cm stakes
- ☐ Two trees or two poles 2 to 3 metres apart.

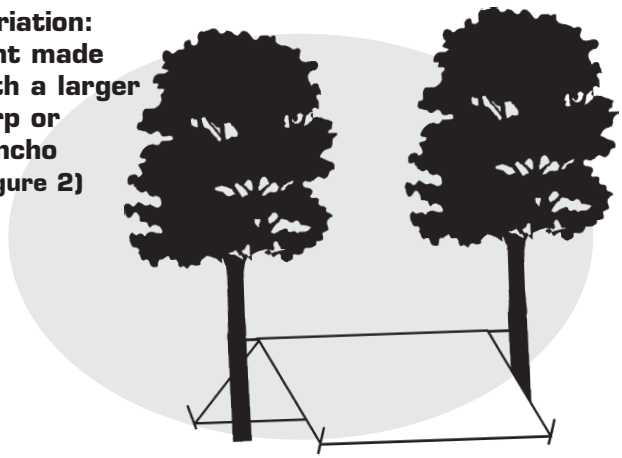
To make the lean-to:

- ☐ If using a poncho, tie off the hood



Lean-To made from a poncho, garbage bag or tarp (Figure 1)

Variation: Tent made with a larger tarp or poncho (Figure 2)



and armholes so they won't leak. If using a garbage bag, slit it along one side and the bottom so you have one large piece of plastic.

- ☐ Cut the rope in half, tying half of the rope to each top corner of your plastic sheet. To make sure the rope doesn't slip, find a small, round (not sharp) rock and tie the corner of the bag or poncho around the rock. For tarps, use the grommets for tying.
- ☐ Attach 10 cm strings (blades of grass?) to each rope about 2.5 cm from the poncho or the grommet of a tarp. These 'drip sticks' will keep rainwater from running down the ropes into the lean-to by allowing the water to run down the line before entering the shelter.
- ☐ Tie the ropes about waist high on the trees (uprights). Use a round turn and two half hitches with a quick-release knot.
- ☐ Spread the plastic sheet or tarp and anchor it to the ground with heavy rocks, putting sharpened sticks through the ropes or edges of the plastic into the ground. Cheap garbage bags tear easily. Make sure you have good quality ones in your survival kit.
- ☐ For additional protection from wind and rain, place brush, your backpack, or other equipment at the sides of the lean-to.
- ☐ Ensure that the back of your lean-to faces into the wind. To reduce heat loss to the ground, place insulating material, such as leaves or pine needles on the floor. *When at rest, you can lose as much as 80 percent of your body heat to the ground.*

Variation: Tent made with a larger tarp or poncho (Figure 2)

This tent protects you from the elements on two sides.

Drape the poncho or tarp over a rope tied between the trees/poles. Keep the peak low to prevent wind blowing it apart, but high enough to get underneath. Have your Scouts improvise on how to make this tent when there are no trees close enough to use. The problem-solving skills they develop will help them in a real survival situation.

Debris Lean-To/Shelter (Figure 3)

If you are in a wooded area with enough natural materials, you can make a shelter without the aid of tools or with just a knife. It takes a bit longer to make this type of shelter, but if done well, it can protect you better from the elements and provide more insulation. The shelter can be made one-sided for a lean-to or two-sided for a more protective shelter.

Equipment:

- ☐ Tree(s) or large rock(s) or other support(s) that can support a central pole or tree branch
- ☐ One central pole/branch about 2-3 metres long and 2.5 cm in diameter
- ☐ Numerous poles/support branches about 2.5 cm in diameter for beams
- ☐ Cord, rope, fishing line or vines for securing the horizontal support to the trees
- ☐ Other poles, saplings or vines to crisscross the beams.

To make this shelter:

- ☐ Support the central pole at one or both ends at chest height with a single tree or rock at one or both ends. This is the horizontal support. If a standing tree or rock is not available, construct a biped using Y-shaped sticks or two tripods. Ensure the central support can't fall or blow down.
- ☐ Place one end of the other branches on one side of the horizontal support. As with all lean-to type shelters, be sure to place the lean-to's back side into the wind.
- ☐ Crisscross saplings or vines on the beams. Ensure the ribbing is wide enough to accommodate your body and steep enough to shed moisture.
- ☐ Cover the framework with brush, leaves, pine needles, or grass, starting at the bottom and working your way up like shingling a roof. Place these crosswise on the ribbing. These form a latticework that will keep the insulating material (grass, pine needles, and leaves) from falling through the ribbing into the sleeping area.
- ☐ Add light (dry, if possible), soft debris over the ribbing until the insulating material is at least one metre thick — the thicker the better.
- ☐ At the entrance, pile more insulating material to close the entrance or build a door once inside the shelter.
- ☐ Place straw, leaves, pine needles or grass inside the shelter for bedding.

Shelters can be made with lots of variations. In fact, it's a good idea to have your youth practice variations, so that if they are ever faced with a real survival situation, they'll be prepared. Warning! If you spend a day making shelters with them, you may find they won't want to leave at the end of the day!

– Bob Loney works with the 1st Bedford Scout Troop in Bedford NS. His troop is not as 'sheltered' as you might think. Watch for more articles from Bob on how to build/light a fire without matches and gather water using an in-ground still.

Linking to Strategic Directions #1 and #4.

Debris lean-to or shelter (Figure 3)

Other Useful Resources

In addition to the web sites suggested in the October article, the following resources may provide other tips for survival:

- January 1994 *Leader* article "Zen of Tarps". Found on Scouts Canada's web site under For Leaders, Resources, Outdoors
- Scouts Canada's *Scout JUMPSTART Team Building package*, Winter Survival Game
- Scouts Canada's *Fieldbook for Canadian Scouting*, pages 26 – 35
- Previous resources and web sites from Survivorman Part I, October 2006 *Leader Magazine.*