BUILDING SHELTER

SCOUTS SURVIVAL SKILLS BADGE

SCOUTS VICTORINOX
The Scout Association recognises that bladed and sharply pointed hand-tools are important for working on survival skills. We promote the safe use of knives used as a tool reiterating UK Law. Knives with a fixed non-folding blade, a folding knife with a blade over 3 inches in length or a folding knife which locks in place require the person carrying such a knife in public (whatever age) to have good reason for carrying the tool. It is illegal to sell such a tool to a person under 18.

The Scout Association holds no responsibility from injuries that have occurred as a result of using this resource. Whenever a knife is to be used in an activity a risk assessment must be made and suitable controls put in place.
INTRODUCTION

Shelter is one of the top priorities in a survival situation so it is essential to know how to construct a simple shelter from natural resources.

The survival skills badge requires Scouts to demonstrate knowledge of different kinds of shelter and construct one as part of an overnight survival exercise. This pack will help Scouts to think about the best place for construction. It also provides a step by step guide on building two types; an A-Frame shelter from natural resources and a tarp shelter using some basic lightweight equipment that can be carried as part of a survival kit.

Scouts can complete the activities at the end of the pack to show their understanding of these areas and to help plan and evaluate an overnight expedition.

SHELTER CHECKLIST

Before you start building your shelter, check that the site you are building on is suitable:

1. Avoid areas where there are animal trails, ants or insect nests to avoid any unwanted visitors.

2. Make sure there are no dead branches above you that could break and fall on you.

3. Note where the sun rises and sets, it can be beneficial to point the entrance towards the east so the morning sun falls on you.

4. Work out the direction of the wind to avoid being exposed to the cold.

5. Use the natural terrain and foliage such as slopes and holly bushes to help protect from the impact of the wind.

6. Avoid low ground between two high points as cold air sinks and rain water may collect there.

Collect your building materials before you start to build your shelter.
A-FRAME SHELTER

An A-frame shelter is shaped like a letter ‘A’. It is a good emergency shelter as it can be built relatively quickly from materials found in a forest. It is quite sturdy if constructed properly and can be built to any size.

To make your frame
1. Use a long straight sturdy stick for your ridge pole. Make sure it is taller than you otherwise your shelter will not be long enough to cover you.
2. Find two tall and two shorter sturdy sticks; each set of two should be of similar heights. These will be your forked supports and should have a ‘Y’ shape at one end to lock into place with the other sticks.
3. Gather lots of straight sticks. These will be positioned along the side of your shelter and provide supports for the covering.
4. Use a sharpened stick for digging and create holes in the ground to wedge the supports in place.
5. Once you have your frame clear the ground under it of any stones or sticks, lie down in the space to check you fit under it and your feet do not touch the ridge pole.
6. Use as many straight sticks as possible to build up the sides of the frame. Do not use rotten sticks and trim to size so they don’t hang out too far over the top of the ridge pole. If they move around then wedge them into the ground or use thin branches or plants to weave them together for support.

For the covering and inside
- large-leafed foliage such as bracken (Fern) – cut rather than pull it out of the ground
- large pieces of tree bark
- thin twigs such as silver birch
- leaf litter – collect in an old tarp
- groundsheet

What to do
1. Use the five sticks you collected for your ridge pole and forked supports to create a sturdy ‘A’ shaped frame. Interlock the supports at the ‘Y’ fork, you should be able to lean your weight on the entrance without it falling over.
2. Build the frame at about a 60 degree angle down the sides.

TIP
A ridge pole is the horizontal pole that supports the roof of a tent.
Once you have finished the frame you can start to cover it with the large pieces of bark, thin twigs and foliage that you have collected.

After you have added this first layer you then add the leaf litter starting from the base of the shelter and building up towards the top. In good conditions a minimal covering will be enough but if it is going to be rainy or windy then add at least 30cm of leaf litter.
**3M X 3M TARP SHELTER**

A tarp shelter can be easily constructed using some basic lightweight equipment carried as part of your survival kit.

**You will need**
- 3m x 3m tarp (with tying loops)
- minimum of seven tent pegs
- three guys lines
- one suitably sized pole (adjustable or wooden)
- Swiss Army Knife - for sharpening wooden sticks

**What to do**

1. Lay your tarp out on the ground, think about where the front will be and the direction of the entrance.

2. At the back of the tarp firmly peg the loops to the left and right of the corner loop, do this on both back corners. Then take the corner flap and tuck it in under the secured loops. Do this on both sides.

3. Go to the front of the shelter. Starting on the left corner, take the loop and bring it across to the right and position it about an inch past the first loop from the corner and peg it down. Do the same for the right hand side. These pegs determine the size of the door; pegging the two corner loops in the centre would form a slit-like door and therefore a 100% sealed shelter.

4. Put the pole in position to give the shelter height and rigidity. If you are using natural resources, you should use a length of wood about an inch in diameter, such as hazel. If you have brought an adjustable pole, the height should be around three feet but you may need to adjust it.

5. Your tarp should have reinforced central ridge line loops for positioning the pole to stop it from tearing through the tarp. If your tarp is not reinforced, use a small length of gaffer tape or anything suitable. Position the pole under the first central loop located in from the front entrance.
If the ground is soft you may need to make a pole foot. Find a small block of wood and using the awl on your Swiss Army Knife dig out a hole big enough for the pole to fit in. This will provide stability for the pole and stop it from sinking into the ground.

You should now have a stable tent structure with a flap at the front. Grab the two corners of the flap and pin them three loops back along the side using a guy line and peg. If you have made a slit-like entrance the flap is a different shape and just needs pinning on one side.

Attach the final guy line to the central loop at the front of the shelter and peg it a few feet from the entrance. This tightens the front and gives the shelter more support.

TIP
If you do not want to carry tent pegs or an adjustable pole you can make these from sticks using a Swiss Army Knife to sharpen them.
ACTIVITY SHEET

DESCRIBE AND DRAW A DIAGRAM OF THE TYPE OF SHELTER YOU ARE GOING TO MAKE ON CAMP. WHAT WILL YOU NEED TO MAKE IT AND HOW WILL YOU BUILD IT?

Type of shelter chosen

What materials / resources will you need?

What are the steps to build it?

Why did you choose this type of shelter?

1

2

3
AFTER YOU HAVE BUILT THE SHELTER AND CAMPED IN IT

What challenges did you face and how did you overcome this?
Example: rainy weather / used thicker leaf coverage for shelter

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What would you do differently next time?

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Stick a photo of you in your shelter here: