

DISTRESS SIGNALS

SCOUTS SURVIVAL SKILLS BADGE



CONTENTS >>>>>

Page 3-7

Signalling for help

Page 8-9

Carve your own elder whistle

Page 10

Activity Sheet



THANKS TO >>>>>

Austin Lill

Terry Longhurst

22nd Hampstead Sea Scout Group

15th Chingford Scout Group

for their contributions to this resource.

SCOUTS AND VICTORINOX DISCLAIMER

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, or any other activity a risk assessment must be made and suitable controls put in place.



SIGNALLING FOR HELP >>>>>

INTRODUCTION

Preparing for an emergency situation before you embark on an expedition can help in the event of a crisis. Becoming lost, injured or stranded in the great outdoors can quickly become a life threatening situation, especially in extreme weather conditions. Having good communication skills and knowledge of different distress signals is vitally important, particularly when you're exploring remote areas. The ability to signal for help both within your group and for outside assistance is the number one priority in being rescued. While modern technology means help is often at your fingertips, you also need a reliable back up plan in case technology fails you.

Signals can be visual or audible. Visual signals include building a fire and making smoke signals, flashing a torch, waving a flag or laying out symbols on the ground. Noise is another way of attracting attention and a whistle or even an air horn can be an essential piece of kit in a survival situation.

Prepare by practicing some of the international distress signals before you go on an expedition, or you may want to use some signals of your own. Make sure any bystanders know you are practicing and not in a real emergency situation.

CHECK IN TIMES OR LOCATIONS

Before you start on an expedition, especially in a remote area, it's a good idea to agree on some check in times or locations. You could agree to meet leaders at a certain location or to call or signal at a certain time to show that everything is fine. If the group does not arrive, or a call or signal is not seen or heard, leaders will be alerted that something is wrong and can begin to search for the missing group, or raise the alarm with rescue teams.



SAFETY TIP

Safety is paramount even in emergency situations, and you do not want to make your situation worse. Brush up on your fire building skills and fire safety information before you leave for an expedition in case you need to build a signal fire.

SIGNAL FIRES

Fire is an effective way of signalling for help as smoke can be seen by day, and flames will stand out at night. A signal fire is not the same as a cooking fire. Try to find a clear location that is high up and well away from nearby trees and bushes so it can be seen from a distance.

Assess what natural resources are available to you. If you are in an area with lots of dry wood and foliage, you can keep your signal fire lit for a long time. If you don't have a lot of fuel, build the fire, only lighting it when you see or hear help coming on the ground or a search and rescue helicopter.

Build up your fire with plenty of dry tinder and small wood kindling so it will be easier to light. To keep it dry and make sure it can be lit straight away, build a frame with a shelf. Find three long, straight thick sticks and lean them together in a triangular shape, binding the tops together with cord or vine. Create a shelf halfway down the supporting sticks by tying branches to them. You could also build a box frame structure around the fire, stacking logs in the style of a tower fire.

If you are signalling during the day add a layer of green leafy foliage to the shelf or pile it over the box frame. This creates a thick white smoke which can be seen from a distance. At night, remove the foliage as you want large visible flames instead.

Have both dry wood and green foliage ready to make sure you have plenty of fuel to feed the fire.



TIP













If you have enough fuel and space, build three fires in a triangular shape. Communicating a signal three times in the shape of a triangle is an internationally understood distress signal.



GROUND TO-AIR SIGNALS

There are a series of symbols for communicating with emergency air crews and it is worth learning these before walking or climbing in remote areas. You will need to mark out the symbols on the ground, making them as large as possible so they can be seen from the air. The recommended size is 3m wide by 10m long, with about 3m between symbols if you need to use more than one. You can use rocks, logs, your backpacks, groundsheets or make grooves in the ground.

Ground to air symbols

	We have an injury and need a doctor		I am unable to move		Affirmative / Yes ('Y' is also understood as 'Yes')		All is well
	I need medical supplies		I am moving this way		Negative / No		I do not understand
	I need food and water		I need a compass and a map		Please indicate in which direction I should travel		I think it is safe to land here

Body signals

	Pick us up		Need mechanical help		All is well		No		Yes
	Can proceed shortly		Have radio		Land here		Do not attempt to land		Use drop message
	Need medical assistance								

TIP

If you need to move location, leave a tracking sign to tell rescuers which direction you are travelling in. See Leaving Signs section on page 7.

USING A MIRROR OR TORCH

On a sunny day a torch or mirror can be used to attract attention by reflecting the sunlight. You can use other objects such as a piece of tin foil or foil emergency blanket, a metallic bottle or a piece of reflective clothing such as a belt buckle. If you see a rescue aircraft, aim the reflective surface so you capture the sun's rays and reflect them towards it.

At night a torch can be used to signal but make sure you have fully charged batteries before you leave on your expedition. You may want to take a wind up torch to avoid the issue of your batteries running out, and some Swiss Army Knives have a torch tool option.

TIP

Special survival rescue mirrors have built-in sight and aiming aids and could form part of your survival kit.



MORSE CODE

Morse code uses light to send a message. Each character or number is represented by short (dot) or long (dash) signals.

SAFETY TIP

Don't aim the light of a signal mirror towards a person at close range as it may cause damage to their eyesight.

Only use a mirror or light to signal an aircraft if you have already called for emergency rescue, or when rescue aircraft are likely to be out looking for you. Do not signal for more than a few seconds at a time as it may blind the pilot.

Morse code table

A	• —	S	• • •
B	— • • •	T	—
C	— • — •	U	• • —
D	— • •	V	• • • —
E	•	W	• — —
F	• • — •	X	— • • —
G	— — •	Y	— • — —
H	• • • •	Z	— — • •
I	• •	1	• — — — —
J	• — — —	2	• • — — —
K	— • —	3	• • • — —
L	• — • •	4	• • • • —
M	— —	5	• • • • •
N	— •	6	— • • • •
O	— — —	7	— — • • •
P	• — — •	8	— — — • •
Q	— — • —	9	— — — — •
R	• — •	0	— — — — —
Full stop .	• — • — • •		
Comma ,	— — • • — —		
Question mark ?	• • — — • •		
Exclamation mark !	— • — • — —		
Slash, fraction bar /	— • • — •		
Ampersand, wait &	• — • • •		
Double dash =	— • • • —		
Plus +	• — • — •		
Hyphen, minus -	— • • • • —		
At sign @	• — — • • •		

TIP

SOS is the most well-known signal in Morse code and is easy to learn – dot-dot-dot-dash-dash-dash-dot-dot-dot



LEAVING SIGNS

If you need to move location or realise you are lost, knowing a few basic tracking signs can be a way for others to follow or find you.



Direction

A basic directional arrow – it can be made from sticks, stones or even twisted grass.



Turn left or right

A variation on the basic directional arrow.



Water in this direction

This sign shows followers the direction of a water source.



Not this way

Use this symbol when you do not want those following to take a particular route.



Over obstacle

Use this symbol when a trail crosses over an obstacle like a fence or a stream.



Message this way

This symbol indicates that a message or note has been left nearby – usually somewhere high up and visible such as the branches of a tree or on a rock.





Party split up

This symbol shows that the main party has split up and is now following two separate paths.



Gone home

This symbol means it is the end of the trail and everybody has gone home or back to base.

WAVE A FLAG

Use brightly coloured material to attract attention, attaching it to a long stick to make a flag. This will allow you to wave it further and if you plant it in the ground while you are resting, it can still be seen.

USING A WHISTLE

A whistle is an effective way of alerting others that you are in need of help or rescue, especially if you can use Morse Code to communicate a message. If you do not have a whistle you can carve one using elder wood and a Swiss Army Knife (see Carve Your Own Elder Whistle Activity Sheet).



CARVE YOUR OWN ELDER WHISTLE >>>>>

An elder whistle will not be as loud as a bought survival whistle. However, elder is a common resource and a whistle is easy to make as there are no metal or moving parts. In an emergency, it's good to know how to carve your own whistle to attract attention.

TOOLS

You will need a Swiss Army Knife, with a small knife blade, a saw, scissors and an awl (optional). A Victorinox Huntsman Swiss Army Knife would be ideal.

WHAT TO DO

- ① Select a suitable piece of elder (*Sambucus nigra*) which should be damage-free and around the diameter of a 20 pence coin. You can use other non-toxic wood to make a whistle, but elder is soft and has pith running through the middle which negates the need for a drill.
- ② Use the saw tool on the Swiss Army Knife to cut a length of about 5-6cms.



- ③ When you have finished using the saw, or any other tool, fold it carefully back into the body of the knife.
- ④ Once cut, tidy up the ends if necessary with a small knife or scissor tool.



- ⑤ Remove the pith. A thin stick will do but you could practice some knife skills by pointing a stick, cutting some slots in the other end and using it like a chimney brush as you push it through.
- ⑥ Use the awl to scrape out any leftover pith. Clear any debris inside by blowing into it. Be sure to draw breath before putting your mouth to the tube to blow or you'll breath bits in. If preferred, the bark can be stripped off using the awl.



- ⑦ Using the small knife blade cut a notch as shown about a centimetre from one end. It needs to go a little way through the wood.



! SAFETY

Always think twice, cut once when using a Swiss Army Knife.

8 Cut a shallow slice about a centimetre further in from the end towards the notch.



9 Find some sticks that are around the diameter of the inside, where the pith was. Push a stick a little way into the tube at the opposite end to the notch. It needs to be a snug fit. Cut off the waste wood with the saw level with the whistle.



10 The process to form the actual whistle is similar but the end must be sawn flat and a slice of about 2 mm taken off the top. Insert this into the end no further than the straight cut and then cut the stick with about 3cms of waste protruding. Test the whistle and adjust the slice depth if it doesn't make a sound.



11 When a whistle sound is produced, cut the waste wood off snug to the whistle body.



i ATTRACT ATTENTION

Blow six good long blasts, stop for a minute and repeat. Don't stop if you hear a reply but keep repeating the blasts until help arrives.

