



# Loudoun Academy



## Duke of Edinburgh's Award

### Expedition Pack

### 2019/20



Name:

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# 1. Introduction

This pack is designed to inform you of everything you need to know in preparation and support of the Duke of Edinburgh (DofE) award expedition. It will help you train, plan and prepare thoroughly for expeditions. You should keep this in a safe place so you can refer to it as required.

By the time you are undertaking the expedition you should be under way with other DofE award section activities: volunteering, skills, physical and if you are undertaking the Gold Award a residential.

Loudoun Academy supports participating pupils through the Bronze, Silver and Gold DofE awards and the DofE programme is sympathetically run to ensure that it enhances the experience of participants.

## **Electronic DofE Handbook**

An electronic version of the DofE handbook can be found at:

[www.loudounpe.wordpress.com/dofe](http://www.loudounpe.wordpress.com/dofe)

## 2. The Expedition

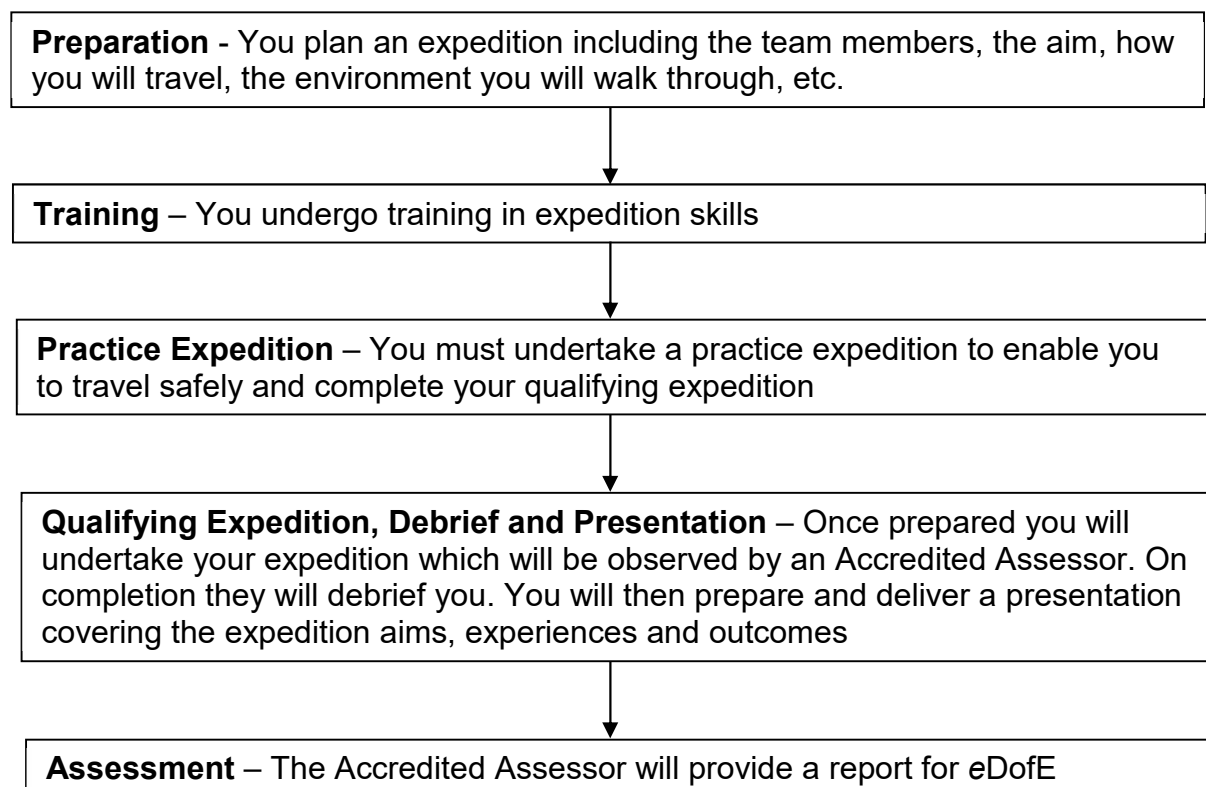
The aim of the DofE expedition is to inspire you to develop initiative and a spirit of adventure and discovery by planning, training for and completing an adventurous self-sufficient journey as part of a team

You must have received appropriate training and do at least one practice expedition, prior to a qualifying expedition, and you must deliver a presentation.

- Bronze award expeditions consist of 2 consecutive days walking with 1 overnight camp.
- Silver award expeditions consist of 3 consecutive days walking with 2 overnight camps.
- Gold award expeditions consist of 4 consecutive days walking with 3 overnight camps.

Expeditions must be completed by your own physical efforts with minimal external intervention and without motorised assistance.

The flowchart below gives an overview of the steps involved for you to complete an expedition.



## **Training Evenings**

You will receive expedition training and planning sessions at school. You will then be ready to attend a practice expedition before attending the qualifying expedition weekend.

Some of the training in these sessions will take place outdoors so please wear appropriate clothing and footwear

## **First Aid**

It is a requirement of the DofE expedition that you are able to administer basic first aid, as required, when on expedition. As part of your DofE training classes you will undergo a basic first aid skills course.

## **Day Training Walks**

A schedule of walking dates has been agreed with the school. These walks are used to practice practical navigation, campcraft and camp cooking skills and to help with team building.

Participants will require to be dropped off and picked up for day walks. Dates may be subject to change due to adverse weather or supervision requirements.

## **Missing a Walk**

If you can't make a date for a walk please inform us as soon as you can. If you can't make the practice expedition or qualifying expedition you will be invited to complete the respective expedition on the next available expedition date. You can undertake your practice expedition on a qualifying expedition date or attend the same expedition in the following year.

## **Practice Expedition**

You are required to attend a practice expedition to put into practice your navigation, campcraft and team training in readiness for the qualifying expedition. Remote supervision will be used where appropriate during the weekend.

## **Qualifying Expedition**

After a successful practice expedition, you will attend the qualifying expedition. You will be remotely supervised and assessed by an external accredited DofE Assessor to ascertain a competent level of navigation,

camp craft and team working skills and that you and your team have complied with the 20 expedition conditions.

### **Walking Dates**

The dates provided are indicative and could be subject to change, because of adverse weather or supervision requirements. Participants in most cases will require to be picked up and dropped off for expeditions.

### **Teams**

You will walk and work in a team with others doing a similar level of award. Teams are usually formed when the day walks are being undertaken as part of a team building exercise. There requires to be a minimum of 4 and a maximum of 7 participants in a team.

### **Supervision**

Supervisors will ensure the safety and wellbeing of participants. As you become more experienced and skilled the level of direct and close supervision will reduce and remote supervision will be used. With remote supervision the leader or other supervisors will remain out of sight of the team allowing you to get on with the expedition without intervention. The leader will know the route the team will take and may check progress at checkpoints. In the main, the supervisor will observe the team from a distance and will generally allow the team to recover from mistakes without intervention.

Assessors may meet teams enroute to ensure they are navigating well and working as a team. Leaders and assessors work very closely together during expeditions.

### **Expeditions**

A Bronze Expedition consists of 2 days walking with 1 overnight camp while the Silver Expedition consists of 3 days walking with 2 overnight camps.

At Bronze Expedition level you require to do at least 6 hours planned activity every day. Planned activity includes travelling time, time to research and document information regarding the aim of the expedition and a reasonable lunch break (usually 30 minutes). Time associated with pitching tents and striking camp or catering is not included. At Silver level you require to do at least 7 hours planned activity each day.

Expeditions should avoid villages and other populated areas unless impractical to do so.

At Bronze level expeditions are normally conducted in rural countryside which may or may not be familiar to you. Long distance paths may be used at Bronze level.

At Silver level the expedition will normally be in rural, open countryside or forest which is unfamiliar to you. The environment is more demanding than Bronze level and long distance paths should not be used except in small sections to link up with other sections of your route, if required.

### **Expedition Equipment**

You will be provided with an appropriate **Ordinance Survey map** for the expedition area, and **compass**. Each team will also be provided with a **first aid kit**.

Do not forget to take any personal medication you require such as inhaler or epi-pen. **You will not be allowed to take part in the expedition without your personal medication.**

Supervisors and/or Assessors will brief your team at the start of the expedition checking they have the equipment they need.

On arrival at the campsite at the end of the days walking, teams must camp up and cook evening meals. Teams must clean all stoves / crockery etc and all rubbish must be bagged and sealed.

All items belonging to the teams should be organised and placed inside the tents before nightfall. After that you are free to enjoy your evening and reflect on the expedition.

At the end of each expedition, teams return all school tents, stoves, rucksacks and other borrowed equipment to the leaders.

### **eDofE**

The eDofE is an interactive online system that helps you manage your DofE programme and enables Leaders to monitor your progress. Once they have formally enrolled for DofE with the school you will be set up on eDofE. eDofE route planning and mapping allows you to plan your routes and print out route cards.

### **Mobile Phones**

The use of mobile phones for calling and texting is severely discouraged during the expedition including at the campsite. Mobile phones can be carried, preferably sealed in a water proof bag, but should only be used to call or text in emergencies.

Phones with music and personal music players can be carried but music should not be used while walking or undertaking other planned activity.

Phones can be used to take photographs and videos and to record information specific to the aim of the expedition.



### 3. The 20 Conditions of a DofE Expedition

To pass the DofE Expedition the following 20 conditions must be met

Planning the expedition	1	The team must plan and organise the expedition; all members of the team should be able to describe the role they have played in planning
	2	The expedition must have an aim. The aim can be set by the Leader at Bronze level only
	3	All participants must be within the qualifying age of the programme level and at the same Award level (i.e. not have completed the same or higher level of expedition)
	4	There must be between four and seven participants in a team (eight for modes of travel which have tandem)
	5	The expedition should take place in the recommended environment <ul style="list-style-type: none"> <li>• Bronze: Expeditions should be in normal rural countryside – familiar and local to groups</li> <li>• Silver: Expeditions should be in normal rural, open countryside or forest – unfamiliar to groups</li> <li>• Gold: Expeditions should be in wild country (remote from habitation) which is unfamiliar to groups</li> </ul>
	6	Accommodation must be by camping or other simple self-catering accommodation (e.g. camping barns or bunkhouses).
	7	The expedition must be of the correct duration and meet the minimum hours of planned activity <ul style="list-style-type: none"> <li>• Bronze: A minimum of 2 days, 1 night; 6 hours planned activity each day</li> <li>• Silver: A minimum of 3 days, 2 nights; 7 hours planned activity each day</li> <li>• Gold: A minimum of 4 days, 3 nights; 8 hours planned activity each day</li> </ul>
	8	All expeditions must be supervised by an adult (the Expedition Supervisor) who is able to accept responsibility for the safety of the team
	9	Assessment must be by an accredited Assessor. At Bronze level only, the Assessor may also be the Expedition Supervisor
	10	Expeditions will usually take place between the end of March and the end of October. They may take place outside this period, if so, non-camping accommodation options should be considered
Training and practice	11	Participants must be adequately trained to safely undertake a remotely supervised expedition in the environment in which they will be operating <ul style="list-style-type: none"> <li>• Bronze: Teams must complete the required training</li> <li>• Silver: Teams must complete the required training and a practice expedition of a minimum 2 days, 2 nights</li> <li>• Gold: Teams must complete the required training and a practice expedition of a minimum 2 days, 2 nights</li> </ul>
During the expedition	12	All expeditions must be by the participants' own physical effort, without motorised or outside assistance. Mobility aids may be used where appropriate to the needs of the participant
	13	All expeditions must be unaccompanied and self-sufficient. The team must be properly equipped, and supervision must be carried out remotely
	14	Teams must possess the necessary physical fitness, first aid and expedition skills required to complete their expedition safely

	15	Groups must adhere to a mobile phone use policy as agreed with their Expedition Supervisor and Assessor. This agreement should also include use of other electronic equipment
	16	Participants must behave responsibly with respect for their team members, Leaders, the public and animals
	17	Groups must understand and adhere to the Countryside /Scottish Outdoor Access, Highway and Water Sports Codes (as appropriate)
	18	Participants must plan an appropriate expedition menu, including cooking and eating a substantial hot meal on each day. This is optional on the final day
Post expedition	19	Participants must actively participate in a debrief with their Assessor at the end of the expedition
	20	At Silver and Gold level, a presentation must be prepared and delivered after the expedition

## 4. Ideas for a DofE Expedition Aim (Project)

As a team you have to agree an aim or a project for the expedition. Throughout your expedition you will gather evidence, photographs and notes regarding your project. Examples of this project could be:

### History:

- Explore and document cairns.
- Investigate the changes in local agriculture over the last 100 years.
- Explore an historic place made famous in a film or tv programme and document the scenery.
- Investigate historical sites.
- Photograph and describe interesting old buildings along your route.

### Environment:

- Search for forms of fungi, photograph or sketch them and record them.
- Photograph or draw different types of trees and correctly identify them.
- List and film the different kinds of birds that you see.

### Teamwork:

- Make a video diary of your team's experiences, from camping and cooking to reaching your destination.
- Design a team motif and make a badge or accessory for each team member to wear that reflects your journey.

### Conservation:

- Monitor the levels of litter on your route and plan how you could campaign to reduce this.
- Consider the impact of vehicles on the environment along your route.
- Investigate the maintenance of footpaths and hedgerows.
- Study local efforts to stop the erosion of coastlines.

### Education:

- Create a pictorial map to be used by DofE participants with additional needs.

## 5. Navigation Skills & Techniques

The following techniques are examples of some of the main navigation skills and tips you require to be able to employ prior to the expedition.

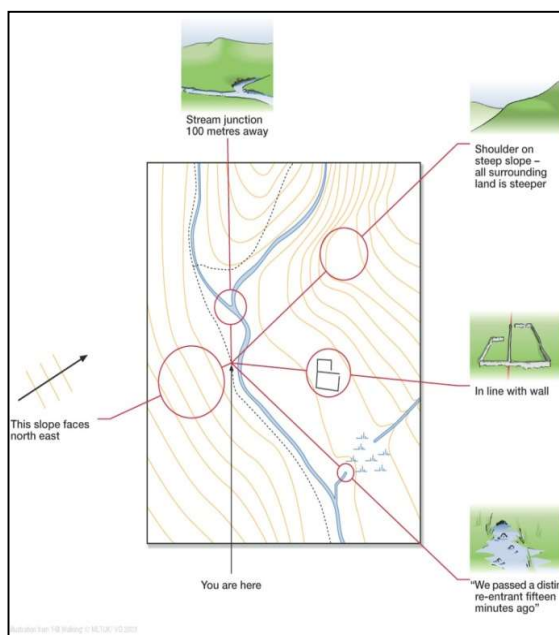
### Map Orientation

A good quality map is the most essential tool for navigation.

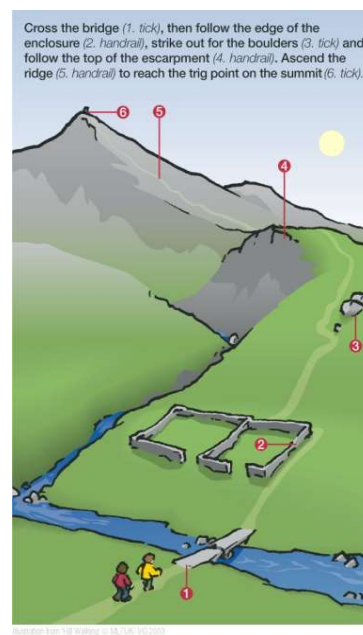
A simple tip to hold your map and turn it to the direction you are travelling in so that all the features in the map match the features on the ground. I often mark the route on the map in pencil and keep my thumb on the current location on the map to speed up navigation.

### Gather Clues / Tick off Features

When using a map look at the route beforehand and form a mental picture of the terrain you will encounter such as streams, changes in terrain, paths junctions, etc. If you do this every time you check your map during the walk it will confirm if you are on the correct route or you will get an early warning if you go the wrong way.



Features to tick off to determine where you are



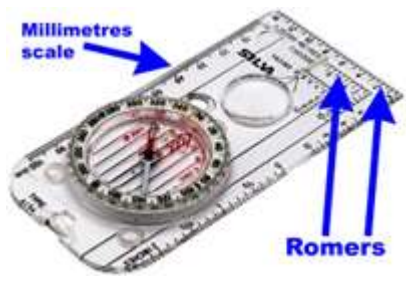
### Maps Symbols

A sound knowledge of the map symbols is important so that you know what you are looking at on the map. In general water features and their names are blue, woodland is shaded green and manmade features have a black outline. It is useful to understand the difference between some

similar symbols such as an embankment and a cutting. When route planning I normally check that I know what all the symbols are in the area that I am going to be walking in.

### Estimate Distance

OS maps are usually 1:25,000 or 1:50,000 scale. On a 1:50,000 scale map 2mm on the map = 100m on the ground. On a 1:25,000 scale map 4mm on the map = 100m on the ground.

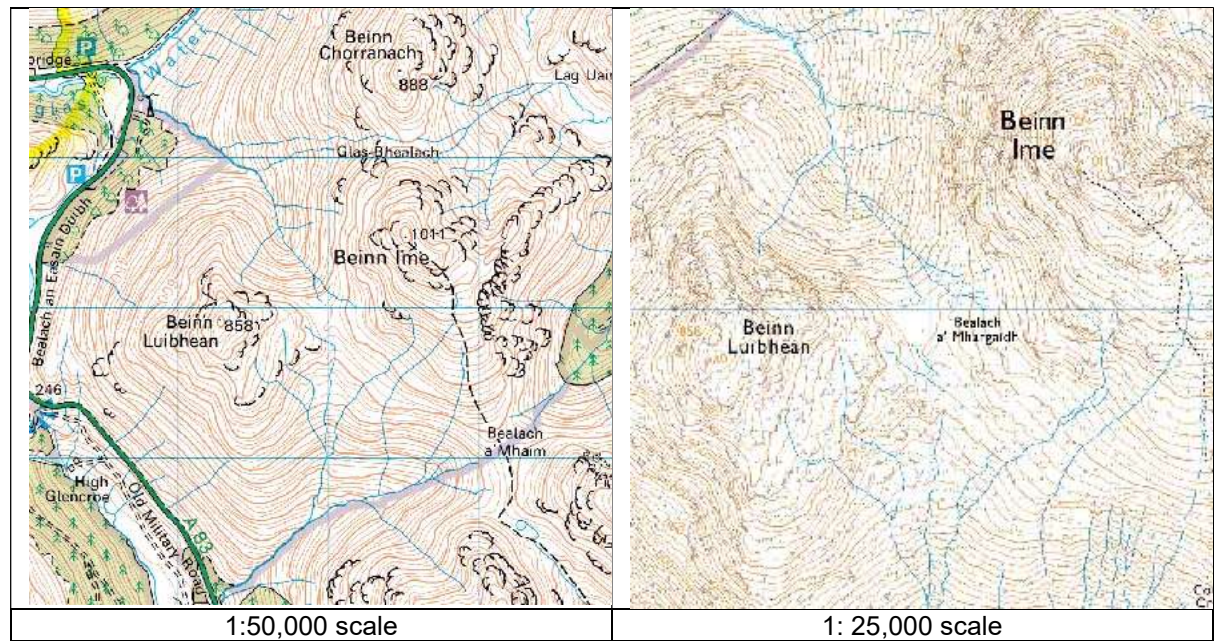


1:25,000 maps show a smaller area than 1:50,000 maps and 1:25,000 maps will show more detail such as field boundaries, walls or fences.

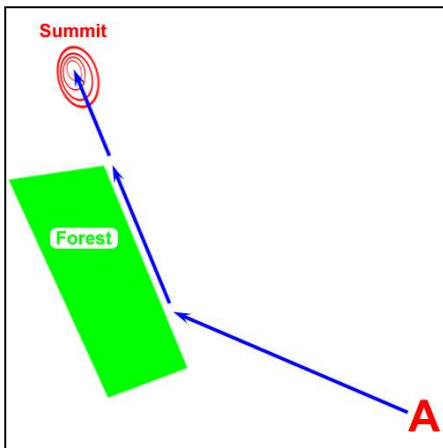
Each grid square on a map is 1km<sup>2</sup>.

To estimate distances on a map use the measure on the side of the compass.

The maps below show the same area around Beinn Ime. The 1:50,000 map covers a wider area but the 1:25,000 map provides more detail.

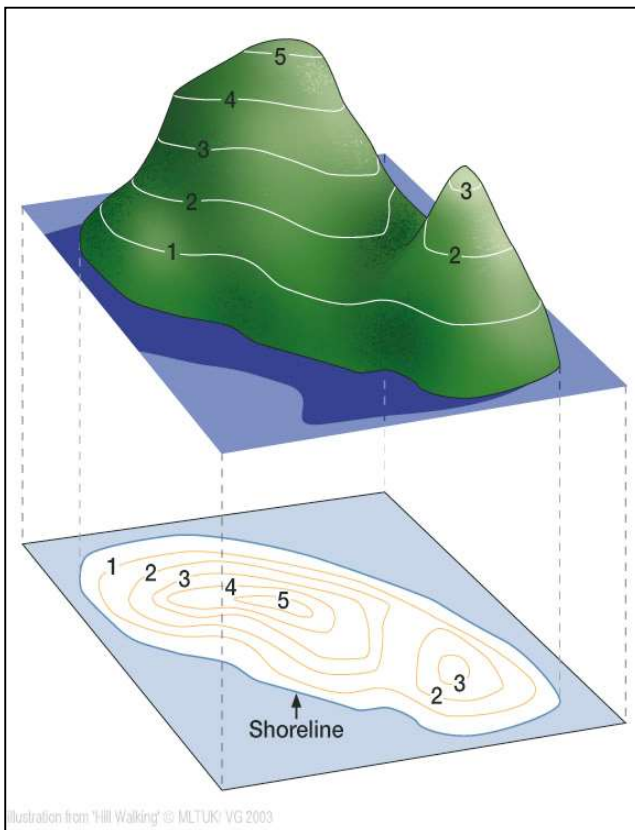


## Use Handrails



Any linear feature can be used as a handrail or an easy to follow feature such as ridges, streams, fence lines, boundaries, paths, plantations, etc. Simply follow the feature and you can make speedy and confident progress.

## Contour Interpretation



A map depicts the 3 dimensional ground in 2 dimensions.

Contours are lines showing points of equal height above sea level. Contours also show the shapes of the hills and surrounding terrain.

On 1:50,000 scale maps contours are every 10m of height with a thicker contour ever 50m. On 1:25,000 scale maps contours are every 5m of height with a thicker contour ever 25m.

By using contours you can easily spot valleys, ridges, steep slopes, flatter areas etc.

## Timing / Naismith's Rule

If you have an idea how long it should take to go a particular distance then you are less likely to overshoot where you want to be or start looking for a feature before you need to. It is a useful technique to use if the terrain on the ground makes accurate pacing difficult (because of snow, thick vegetation, swamp, peat, etc). With Naismith' Rule you calculate 5km per hour plus half an hour for every 300m of ascent. In simple terms this is 12 minutes for each kilometre plus 1 minute for every 10m climbed. This can be tailored to walking speed as follows.

Distance Travelled	Speed: kilometres per hour			
	5 km/h	4 km/h	3 km/h	2 km/h
1000 m	12 min	15 min	20 min	30 min
900 m	11¼ min	13½ min	18 min	27 min
800 m	10 min	12 min	16 min	24 min
700 m	9 min	11 min	14 min	21 min
600 m	7¼ min	9 min	12 min	18 min
500 m	6 min	7½ min	10 min	15 min
400 m	5 min	6 min	8 min	12 min
300 m	3¾ min	4½ min	6 min	9 min
200 m	2½ min	3 min	4 min	6 min
100 m	1¼ min	1½ min	2 min	3 min

## Using a Compass / Follow a Bearing

A compass remains the most reliable device to find direction as it requires almost no maintenance and needs no power supply. A compass uses the Earth's magnetic field by mounting a rotating needle that constantly points to magnetic north when allowed to rotate freely. It is important to keep the compass clear of metals, magnets, cameras, power lines, metal fence posts, etc. or the reading can be distorted.



To take a bearing line the edge of the compass with your current position on the map and with the direction of travel along the intended route. Turn the dial until the lines inside the dial are parallel with the vertical blue grid lines on the map.

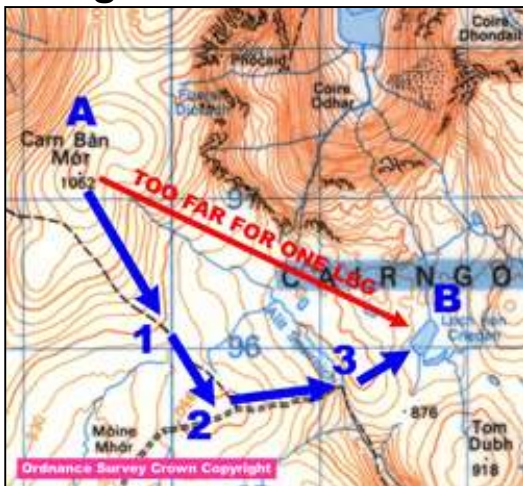
Remove the compass from the map, the bearing is displayed at the top of the compass. Then hold the compass in front of you with the direction of travel arrow pointing away from you.

Turn yourself until the red compass needle is inside the arrow in the dial.  
Walk keeping the red needle inside the arrow in the dial

## Transit Points

The easiest and most accurate way to follow a bearing is to pick out a feature directly in line with the direction of travel then walk to that point. In good visibility this could be a rock or outcrop 500m away. In poor visibility it may be something on the ground 10m away

## Navigate in Sections / Short Legs



In poor weather break navigation into short legs, preferably with easily identifiable feature at the end of each section. Build a picture in your mind of what you expect to see on each leg, take note of distance, bearing, time, etc. as this will reduce the chances of going the wrong way or getting lost.

## Pacing

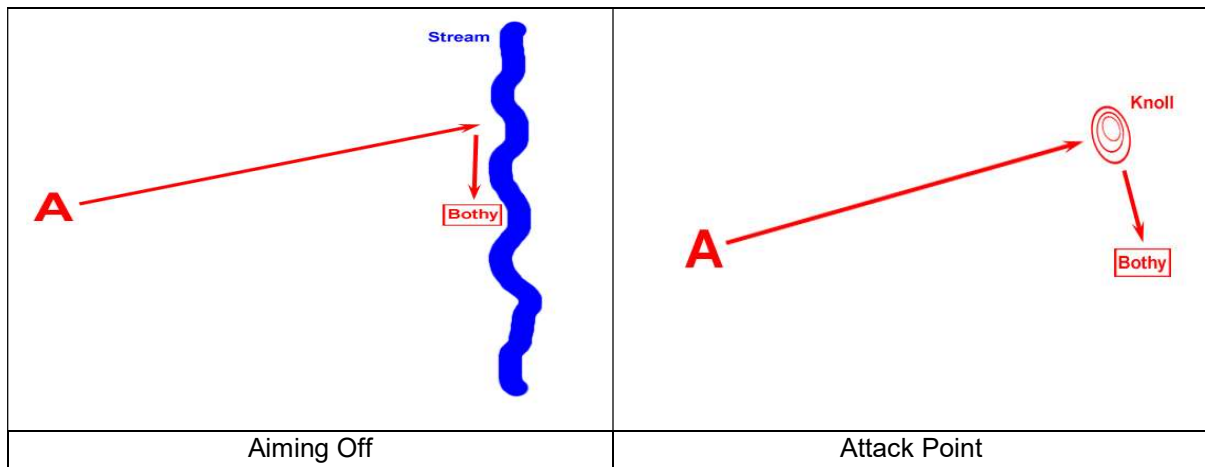
It is useful to know how many double paces you take to cover 100m. Most people usually will take between 55 and 70 double paces for 100m (I take 64 double paces for 100m). This can then be used to work out the distance travelled. To assist with counting some people use beads attached to their compass. The accuracy of pacing can be affected by the ground conditions or the steepness of slope.

## Aiming Off / Attack Points

Route finding can involve locating a particular point on a linear feature such as a bridge over a river or a path junction or a building. If you take a bearing directly at this feature you could veer off line in poor weather. (if you veer off by just  $2^\circ$  over 500m would mean you would be 18m from your intended location. To try to reduce the chance of missing where you want to go you can deliberately aim to one side of the feature and then when you reach the linear feature (track, river, boundary, fence, etc) you will know which way to go to get to the intended location. An attack point is a larger feature that is located near the feature you are looking for (for instance a hill or plantation next to a building). Aim for this larger feature that is harder to miss then use this point as your location to more easily



navigate from that point the shorter distance to the feature you want to get to.

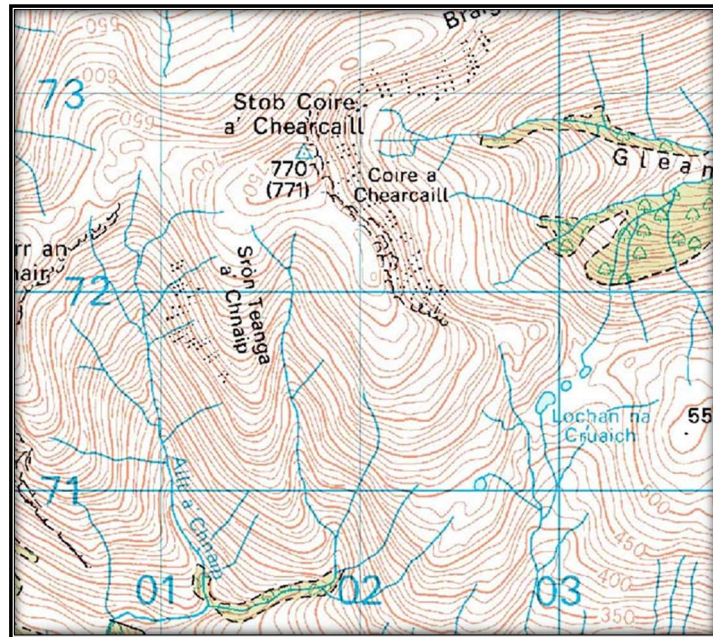


## Contouring for Economy of Effort

On hazard free slopes it is often less tiring to walk around a hill than go over the hill. When walking around the hill it is best not to drop height so look ahead to a point on the landscape at the same height you are and walk towards it. It is natural to drift downhill when trying to contour around a hill without a point on the landscape to aim for

## Grid References

Knowing a grid reference is useful in locating specific points on the map. Generally I would use them mainly to confirm a position in conjunction with a GPS in poor visibility; however, it is still important for filling in route cards, etc. Remember to give the Eastings figure first (go along the hall) before the Northing figure (climb the stairs). If the compass has a Romer Scale this can help with grid reference accuracy.



Let's take an example to show how this system can be used to identify a location. Suppose you plan to climb Stob Coire a' Chearcaill. This mountain is located just a few miles to the west of Fort William. Referring to the map section we see that the mountain lies in grid square 01 72.

How do we know this? Each grid line has a given a number from 0 to 99. This is done for both the eastings and the northings.

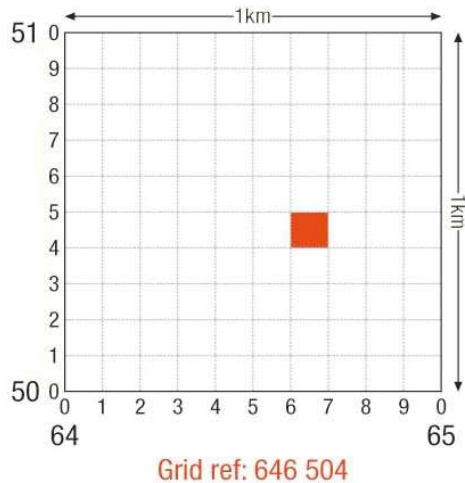
It is convention to define any single square by giving the easting value first followed by the northing value – hence in the present case, the mountain is in square 01 72. This is the four-figure grid reference and defines the location of the mountain to within an accuracy of 1 kilometre.

Now, you may wish to be more precise than this. It is standard practice to go one step beyond a four-figure reference and give a six-figure grid reference. This will give an accuracy of 100 metres.

What you have to do is consider how far along and how far up the mountain lies within the larger 1 kilometre square. You need to work out how many tenths within the square the mountain lies, both to the east and to the north of the bottom left hand corner.

You could guess this but it is far better to use the ruler located on the side of your compass or use the Romer on your compass to measure both distances if it has one. In the present example we determine that the summit of Stob Coire a' Chearcaill is located 7 tenths along and 7 tenths up. The six-figure grid reference is therefore 017 727. This gives the

mountain's position correct to within 100 metres. In other words, the mountain lies somewhere in the 100 metre square which lies to the east and north of this point.



It is worth emphasising that a grid reference refers only to an area; it does not identify an exact position

In our example we have worked out that the mountain lies somewhere within a 100 metre square. For most situations encountered by hillwalkers this is accurate enough. However, it is worth noting that if you use a GPS receiver, a 10-figure grid reference can be recorded. This provides a location correct to within 1 metre.

What is the value of grid references? Basically, the ability to determine grid references is a skill that could be crucial in an emergency.

If you need to convey to the emergency services (Police, Mountain Rescue) where you are, then an exact grid reference may save much time in help getting to you. Grid references are also useful if you wish to leave clear information with someone about where you plan to walk. You might indicate that you plan to climb Stob Coire a' Chearcaill but you can also note (perhaps on a route card) that this hill is located at 017 727. Then, there can be no doubt about where you are going.

## 6. Route Card

Route cards can be completed on eDofE

Steps to complete a route card:

1. Locate your departure point and finish point at the end of the day.
2. Select a route to reach your destination. Select landmarks or features on the map which will enable you to ensure you are on the right path and enable you to monitor your progress (path junction, bridge, building, road crossing, etc).
3. Divide the journey into sections or legs which end at a landmark or feature. Plan for 5 to 8 legs for the duration of the journey.
4. Measure the distance for each leg.
5. Estimate the time for each leg. Add 10 minutes at the end of each leg for a short rest (if behind time this additional time can be used to catch up). With a heavy pack most groups walk at a pace of 3km/h. Remember to add 1 minute for every 10m of ascent climbed.

Distance Travelled	Speed: kilometres per hour			
	5 km/h	4 km/h	3 km/h	2 km/h
1000 m	12 min	15 min	20 min	30 min
900 m	11¼ min	13½ min	18 min	27 min
800 m	10 min	12 min	16 min	24 min
700 m	9 min	11 min	14 min	21 min
600 m	7¼ min	9 min	12 min	18 min
500 m	6 min	7½ min	10 min	15 min
400 m	5 min	6 min	8 min	12 min
300 m	3¾ min	4½ min	6 min	9 min
200 m	2½ min	3 min	4 min	6 min
100 m	1¼ min	1½ min	2 min	3 min

6. Include a lunch break or other planned rest stops in your plan
7. Include any planned stops to carry out tasks and activities associated with the expedition aim. Record these planned tasks and activities on the route card.
8. Add together the estimated times plus breaks and this will give you an estimated time of arrival at your final destination for the day.

9. Record compass bearings of each leg of the route

10. Record details the route will follow such as rivers, coast, plantations, etc.

11. Include alternative, escape routes for each leg in case of emergency.

A sample route card is included on the next pages

# EXPEDITION ROUTE CARD

Aim of expedition:										Name of DofE Group:		
Day of the week:		Date: / /		Day number: (1 <sup>st</sup> , 2 <sup>nd</sup> etc.)		Names of team members:			Address:			
									Tel No: Email:			
Leg	PLACE WITH GRID REF		General direction or bearing	Distance in km	Height climbed in m	Time allowed for journeying	Time allowed for exploring, rests or meals	Total time for leg	Estimated Time of Arrival	Setting out time:		
	START									Brief details of route to be followed or planned activity. (Enter full details of activity on reverse)		
(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)		(k)
1	TO											
2	TO											
3	TO											
4	TO											
5	TO											
6	TO											
7	TO											
			<b>Totals:</b>							Supervisor's name, location and Tel No:		

# ACTIVITY PLAN

Leg/	Task	Activity details

**Route Card – notes on completion**

- For each leg involving journeying only enter route details in columns (b) to (k).
- When non-journeying activity (exploring) is planned at the break between legs, leave columns (c) to (f) blank, enter the estimated time required to complete the activity in column (g), complete columns (h) to (i), and enter brief details of the activity in column (j).
- If exploring is to be carried out during a leg, enter the route details in column (b) to (f), add the time planned for the activity to the rest and meal times in column (g), and complete columns (h) to (k). Enter brief details of the activity after the route description in column (j)
- The journeying total in column (f) must be at least half the minimum required hours of planned activity.

## 7. Equipment

A summary equipment list is provided on the DofE website.

Loudoun Academy has the facility to loan some equipment to participants of DofE expeditions:

- 2 and 3 person tents
- Rucksacks
- Cooking stoves and fuel
- Maps & Compass
- First aid kit & Emergency shelter

If you can, please bring your own walking boots, sleeping bag, rucksack and roll mat.

Loaned equipment will be available the week before each expedition. All loaned equipment must be kept clean and be returned intact at the end of the expedition.

The school can repair any accidental damaged caused by participants however we request that you respect and be responsible with all equipment.

### Essential Equipment

Participants must have the following equipment before starting each expedition:

- Waterproof Jacket and trousers
- Enough food for the expedition
- Emergency rations

### Boots

Boots are one of the most important pieces of kit. Unsuitable or poorly fitting boots can ruin an expedition. It is important comfortable boots are used. New boots can cause blisters so it is advisable to wear new boots on smaller walks prior to the expedition.

### Socks

It is advisable that you have a fresh pair of socks for every day of walking. There are different opinions on how many pairs of socks should be worn when walking. Some people wear liner socks under walking socks other



just wear the walking socks. Socks can be wool although some walking socks are available that are a mixture of man-made fibres. Nylon socks should be avoided.

## Trousers

Jeans are **not** suitable for walking in Scotland. When wet they are heavy and take heat away from your body instead of insulating it. They also take a long time to dry out. Suitable trousers include:

- Tracksuit trousers or leggings made from polycotton are quick drying and provide some wind proofing.
- Walking trousers can be expensive but are also ideal for expeditions

It is also useful to consider thermals as they provide an extra layer when cold and can be worn under waterproof trousers. They are also useful when in a sleeping bag at night.

## Upper Layers

It is better to take a number of thin layers rather than one thick layer. This allows for adjustment in different weather conditions.

**Base layer:** A base layer is worn next to the skin. Modern thermal tops are light and wick moisture from the skin keeping you more comfortable and reducing the chance of chilling.

**Mid layer:** The mid layer should be put on when you are getting cold and should be removed when you are getting hot. Suitable mid layers include a fleece or a woollen jumper. Try to avoid cotton clothing as they take a long time to dry if wet and take heat away from the body when wet.

**Outer layer (Waterproof):** A waterproof jacket with hood and waterproof trousers are **essential**. Ensure that the outer layers are waterproof not just shower proof.

Do not wear all your clothes as soon as you set out on a walk – after five minutes of walking you will start to overheat.

## Other Essential Clothing

**Hat:** - wool or fleece. A sun hat may also be required in summer weather.

**Gloves or mitts:** – wool, fleece or ski gloves.

## 8. Expedition Kit List

### Personal clothing over the period of the expedition

- Strong soled walking shoes
- Thick socks
- Comfortable walking trousers – **no jeans**
- Shirts / tops
- Warm jumper / Fleece
- Underwear (& possibly thermals recommended)
- Waterproof jacket and waterproof over-trousers
- Spare clothes

All clothing packed in the rucksack should be stores in a waterproof liner or bag.

### Personal kit

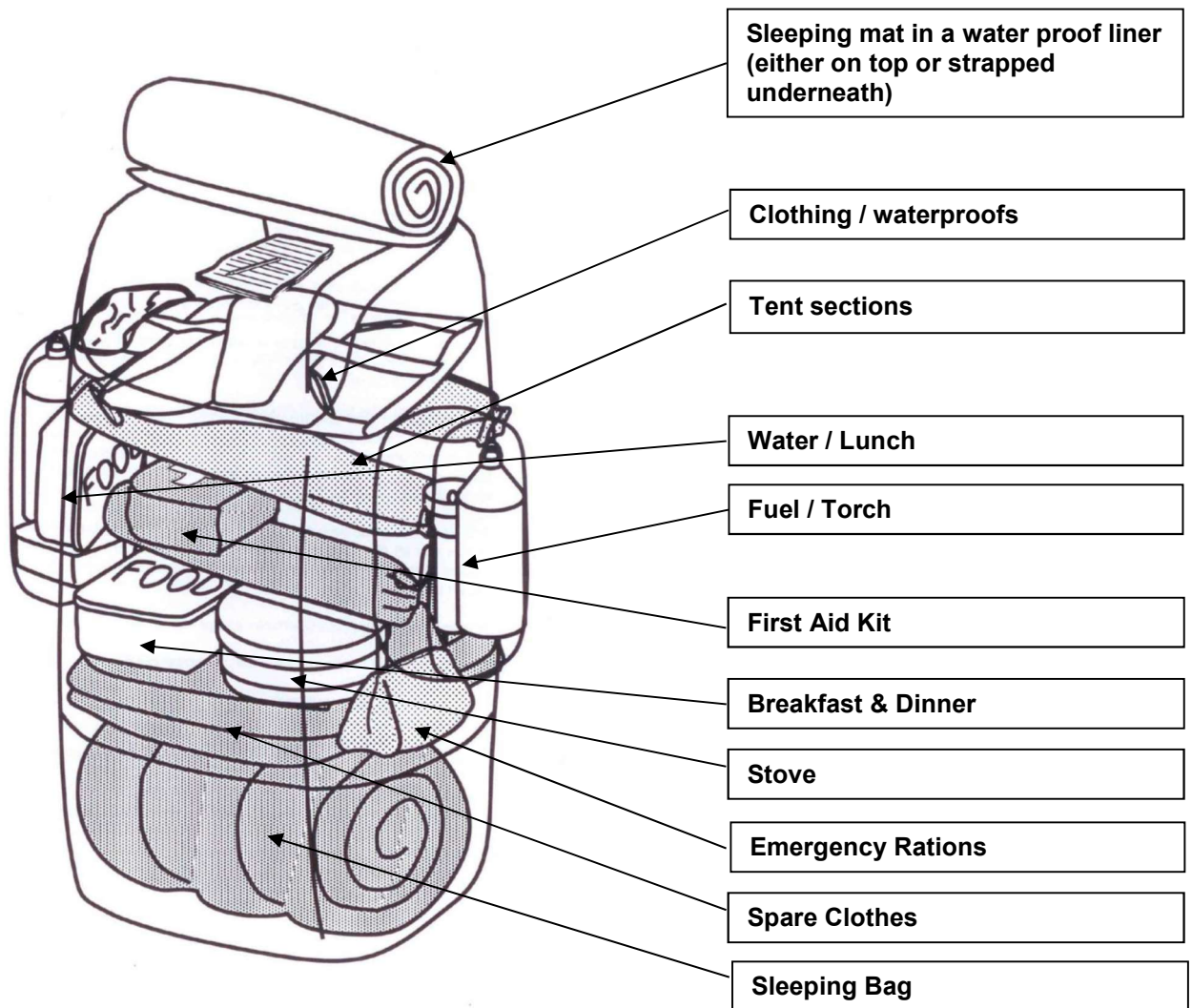
- Rucksack 70 to 80 litre \* (Note: rucksacks are not waterproof!)
- Rucksack waterproof liners (or strong plastic bags/ rubble bags)
- Sleeping bag \* (stored in a waterproof liner)
- Sleeping mat \* (stored in a waterproof liner)
- Personal first aid items / medication
- Watch
- OS Map, Compass\*
- Notebook, pen or pencil, camera (most phones have a suitable camera)
- Torch and spare batteries
- Emergency rations in a sealed bag
- Water bottle
- Knife, fork, spoon; plate, mug and bowl
- Toiletry bag (Tooth paste, tooth brush, small hand towel, wet wipes etc)
- Whistle
- Complete set of spare clothes in a strong waterproof bag
- Sun hat / cream / glasses
- Woolly hat & gloves
- Insect repellent if required

### Group kit (to be divided amongst the group)

- Tent\*
- Cooking stove and fuel\*
- Small bottle of washing up liquid & scorer sponge
- Tea towel
- High Vis Jacket\*
- Plastic bags for rubbish
- Food for the expedition
- Matches (in a small container to keep them dry).

\* Can be supplied from school.

## 9. Packing a Rucksack



### Recommended advice

Expedition rucksacks need to be large enough to carry equipment for multi-day treks. A 60 litter rucksack is the typical size of an expedition rucksack.

All contents should be contained in water proof liners (rubble / bin liners can be used).

Always put your sleeping bag inside a plastic bag.

Put items you are less likely to use when walking (stove, fuel, camp food, sleeping bag) near the bottom or middle of the rucksack.

Keep waterproof clothing accessible.

Map, compass, route card, drinks and snacks should be easily accessible.

Sleeping mats can be strapped to the outside of the rucksack, if necessary but avoid hanging items from the outside of the rucksack.

Don't over pack! what do you really need? The total load of a rucksack should not exceed **1/3** of your body weight. Generally **15kg** should be the maximum weight of a packed rucksack.

Make sure the hip belt of the rucksack is properly adjusted.

## 10. Camping Tips

### Choosing Flat Ground

You need a good night's sleep when camping, especially when you have been walking throughout the day.

You will want to pick out an area which gives you plenty of space to pitch your tent and is an appropriate place for cooking.

One of the best ways to ensure that the ground is flat enough is to get out your sleeping bag and your mattress and simply lay it out on the ground and get in it to see how comfortable it is. This saves you the time and hassle of having to uproot your camp if you subsequently realise that it's not very comfortable after all.

Try to get your tent up as soon as you arrive at the campsite. Ensure lightweight items such as pole and peg bags do not get blown away.

Before entering the tent take off waterproofs and boots. Boots should never be worn in the tent. They can be stored under the flysheet overnight. Keep wet or dirty cloths separate from dry clothes and sleeping bag.

Divide up duties in your team e.g. one person can sort the inside of the tent whilst others prepare food or get water, etc.

Keep the campsite free from litter. Do not leave food packaging where it can be blown away. Waste should be bagged and carried. The campsite must be left completely litter free.

### Weather

Try to select a site that has a natural windbreak.

Wind can be extremely annoying if you're trying to get to sleep and your tent's flapping all night this can also reduce the amount of heat you're able to keep inside your tent which can make for disturbed sleep.

Before you set up your tent make note of which way the wind is blowing. Your tent door should face away from the wind.

Try not to pitch your tent right next to trees.

## **Water**

We will provide water for drinking and cooking at your campsite but look to situate your camp relatively close to water to allow you to wash dishes.

## **Leave No Trace**

It is important to remember your environmental responsibilities. Before leaving your campsite, do a walk around the site and make sure you have packed up all of your gear and disposed of all your rubbish appropriately. If there is no bin to dispose of rubbish safely, you need take it with you.

## **Pitching Tents**

It's important that you've had a go at pitching your tent before you take it on an expedition.

We will practice putting up and taking down tents during your first day walk.

Doing this could save you a lot of time.

The tents used by the school have a 'double skin' which consists of an inner tent and a flysheet (outer tent). When pitching a tent make sure that all the poles are threaded through the correct sleeves before you attempt to secure the poles in the eyelets or rings of the flysheet.

Always ensure that you have the adequate amount of pegs and secure the tent with guy lines.

Pegs should be pushed in at roughly a 45% degree angle and never to remove a peg by pulling it out with the guy rope, the best method for removing it is by hooking it with another peg.

## **Striking camp**

When striking (packing up) camp, you may find that the outer sheet is wet, either due to rain or condensation. If possible, separate the inner and outer and spread them to dry in a suitable place while you continue with the rest of your packing away and other tasks. The inner tent should be dry on all areas except, perhaps, the base of the groundsheet and should be packed away carefully to ensure that it does not come into contact with a damp or dirty flysheet or dirty pegs..

## 11. Food Hygiene and Menus

Menus are planned and food purchased as a team.

Each team must have at least one hot meal per day on the expedition and we encourage that that meal is at least the evening meal, and/or breakfast.

Participants must carry with them the following:

### **Bronze Teams**

2 lunches  
1 breakfast  
1 evening meal

### **Silver Teams**

3 lunches  
2 breakfasts  
2 evening meals

A **water bottle** is essential as you need to drink water even in bad weather. Drinking water will be available at campsites.

Food should:

- Have a high energy content
- Be light and easy to carry (packets not tins)
- Be quick and easy to prepare

### **Snacks**

It is recommended that you carry snacks including sweets, nuts, chocolate and some more sweets to keep energy levels up. I like to carry Trail Mix, Jelly Babies, Tablet and a Mars or Snickers Bar. If anyone in the group has food allergies then the group should avoid, where possible, carrying any food that could impact on allergies.

### **Emergency rations**

Emergency rations should comprise of high energy treats such as chocolate or a small meal. The rations should be sealed in a bag, kept in the rucksack and not opened unless in an emergency or as a 'well done' treat at the end of the expedition.

### **Breakfast**

You must have a breakfast. It is vitally important that you have a good breakfast. If you skip breakfast it will have detrimental effect on your energy levels. We encourage you to plan a breakfast you look forward to having.

## **Tins**

We do not recommend using tins as they are heavy, bulky and have sharp edges when opened. We also do not approve of glass jars and bottles being used as they are heavy, bulky and can present a safety issue.

## **Food & personal hygiene**

All rubbish must be stored in bags and sealed and carried with you until the end of the expedition. All stoves, cutlery, cups and plates used must be washed after each meal.

Hands must be washed before eating and after going to the loo. We recommend using small bottles of hand cleansing gel. Wet wipes are a great way to keep clean and freshen up, as there are no showers on expedition.



## **12. Stove Safety**

### **Location**

Take some time to pick the cooking location. A firm level surface at ground level where the stove will not be knocked over is ideal and it must be at least two metres away from flammable items/tents.

Consider the weather conditions and wind direction.

Make it clear to other people that stoves are lit/hot and get everything needed together before starting to cook. Have somewhere safe nearby to put hot pans.

### **Safety**

Always be familiar with the stove and fuel before setting out. We will practice using stoves during your first day walk.

Never leave a lit stove unattended or unwatched.

Remove gas cartridges from the stove before packing the stove away.

## 13. Awareness of Risks and Health & Safety

### **Fitness**

A good level of physical fitness is generally required. Be aware of your fitness and the fitness of your group throughout each days walking.

### **Identifying and Avoiding Hazards**

It is essential to be aware of the hazards of the countryside you are walking in such as rough terrain, rivers, lochs, bogs, fences, pylons, animals, etc. You should also be aware of human activities in the area such as logging and have contingency arrangements planned just in case. Also take into account the length of daylight as it is more difficult to navigate and pitch camp in the dark. Weather can also be a contributory factor in the amount of available light.

Escape points should also be planned in case of emergency situations or poor weather.

### **Keeping Together**

The expedition team must **stay together** at all times unless impossible to avoid through an emergency situation. As a last resort, if party has to split, one or more should stay with casualty others go for assistance.

## **14. Countryside Code**

The Countryside Code is a way to behave that respects the area and the creatures (both human and animal) that live in the countryside. Much of the Countryside Code is common sense.

### **Litter**

Don't leave litter behind you. All litter needs to be disposed of properly. There are generally no litter bins in the countryside, so carry it with you until you reach somewhere you can dispose of it properly.

### **Roads**

Many country roads are narrow and traffic can travel very fast on them. When you get to a road walk in single file and generally walk on the right side of the road.

### **Fires**

When camping we do not generally build fires. Stoves are provided for cooking.

### **Hiking**

When hiking in open country, keep to tracks and pathways where possible. Always close gates behind you. Respect the land and the animals.

### **Livestock**

As far as possible, keep clear of all livestock. If you reach a field and there's a bull in it, the safest approach is to go around that field; give it a wide berth. Don't cross through hedges, or climb over walls unless there's a stile to use. Ultimately, what you should aim to do is leave the countryside exactly as you found it.

For more information consult the Scottish Outdoor Access Code

## 15. Understanding Weather

Weather has a profound effect on the walking environment. So an impression of what the weather may do for the duration of the walk or expedition is an essential part of the planning process.

An accurate and up-to-date weather forecast essential. Information can be gained from many sources such as:

- The internet
- Television
- Radio
- The Met. Office
- MWIS – Mountain Weather Information Service

As you walk observe weather conditions continually and look out for signs of changing weather such as:

- Visibility
- Wind
- Rain
- Temperature.

### High Pressure

In high pressure the winds tend to be light. Clear skies can lead to overnight fog or even frost. In summer an anticyclone in the vicinity of the British Isles often brings fine, warm weather during the day.

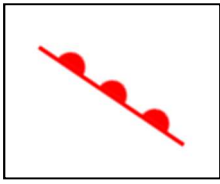
### Low Pressure

In low pressure air is rising and as it rises and cools, water vapour condenses to form clouds and perhaps precipitation. Consequently, the weather in low pressure is often cloudy, wet and windy. There are usually frontal systems associated with low pressure.

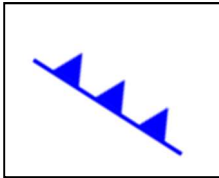
### Fronts

The boundary between two different types of air is called a front.

Fronts move with the wind and fronts tend to be associated with cloud and rain. It is convenient to distinguish between warm fronts, cold fronts and occluded fronts.



A front which is moving in such a way that the warm air is advancing to replace the cold air is called a **warm front**. As the warm front approaches, there is thickening cloud and eventually it starts to rain. As a warm front passes, the air changes from being fairly cold and cloudy to being warm and overcast.



A **cold front** moves so that the cold air is advancing to replace the warm air. This means that as a cold front passes, the weather changes from being mild and overcast to being cold and bright, possibly with showers.



An **occluded front** can be thought of as being a result of the warm and cold fronts meeting. Consequently, ahead of an occlusion the weather is similar to that ahead of a warm front, whereas behind the occlusion it is similar to that behind a cold front.

## **16. Useful Links**

These are some useful websites that may assist you to prepare for your DofE expedition.

### **Duke of Edinburgh Award**

Official Duke of Edinburgh Award website

<http://www.dofe.org/>

eDofE login web page

[www.edofe.org](http://www.edofe.org)

Duke of Edinburgh Award in Scotland website

<http://www.dofe.org/en/content/cms/takepart/notice-boards/scotland/>

### **Mountain Weather**

Met Office website

<http://www.metoffice.gov.uk/>

Metcheck website

<http://www.metcheck.com/UK/>

Mountain Weather Information Service website

<http://www.mwis.org.uk/>

### **Outdoor Access Code**

Scottish Outdoor Access Code web page

<http://www.outdooraccess-scotland.com/>

### **Wild Camping**

Scottish Outdoor Access Code – Wild Camping web page

<http://www.outdooraccess-scotland.com/out-and-about/recreation-activities/wild-camping/>

Visit Scotland – Wild Camping web page

<http://www.visitscotland.com/see-do/activities/walking/wild-camping>

Walk Scotland – Wild Camping web page

<http://www.walkscotland.com/wildcamping.htm>

## **Scottish Hill Walking**

Scottish Mountaineering Club website

<http://www.smc.org.uk/>

Mountaineering Council of Scotland website

<http://www.mcofs.org.uk/>

Munro Magic website

<http://munromagic.com/>

Scottish Hill Walking website

<http://scottishhillwalking.com/index.html>

Scottish Hills website

<http://www.scottishhills.com/html/index.php>

Scottish Sport - Walking web page

<http://www.scottishsport.co.uk/walking/index.htm>

Visit Scotland - Walking web page

<http://www.visitscotland.com/see-do/activities/walking/>

Walk Scotland website

<http://www.walkscotland.com/>

Walk Scotland web page – South West Scotland

<http://www.walkscotland.plus.com/index.htm>

Scot Climb web page – Hill Walking

<http://www.scotclimb.org.uk/hillwalking.shtml>

Loudoun PE Website – E copy of the DofE Handbook

[www.loudounpe.wordpress.com/dofe](http://www.loudounpe.wordpress.com/dofe)

## 17. Key Dates in 2019/20

- **Parent Information Presentation for New Bronze and Silver candidates**  
Tuesday 10 September 2019 7pm to 8pm Assembly Hall
- **Training Evening (outdoor clothing required)**  
Tuesday 17 September 2019 7pm to 9pm Conference Room
- **Training Evening (outdoor clothing required)**  
Tuesday 24 September 2019 7pm to 9pm Conference Room
- **First Aid Training**  
Thursday 26 September 2019 2.50pm to 5pm Assembly Hall
- **Training Evening (outdoor clothing required)**  
Tuesday 1 October 2019 7pm to 9pm Conference Room
- **Day Walk**  
Saturday 5 October 2019 9.30am Dean Castle Country Park Car Park
- **Day Walk**  
Saturday 29 February 2020 9.30am Loudoun Academy
- **Equipment Collection Evening and Route Card Preparation**  
Tuesday 10 March 2019 7pm to 9pm
- **Bronze Practice Expedition**  
Saturday 14 March to Sunday 15 March 2020 9.30 Whitelee Windfarm Visitor Centre
- **Silver Practice Expedition**  
Saturday 14 March to Monday 16 March 2019 9.30 Whitelee Windfarm Visitor Centre
- **Equipment Collection Evening and Route Card Preparation**  
Tuesday 2 June 2020 7pm to 9pm
- **Bronze Qualifier Expedition**  
Saturday 6 June to Sunday 7 June 2020 Location to be confirmed
- **Silver Qualifier Expedition**  
Saturday 6 June to Monday 8 June 2020 Location to be confirmed
- **Equipment Collection and Route Card Preparation (if required)**  
Tuesday 25 August 2020 7pm to 9pm
- **Back up Bronze Expedition dates (if required)**  
Saturday 29 August to Monday 30 August 2020
- **Back up Silver Expedition dates (if required)**  
Saturday 29 August to Monday 31 August 2020
- **East Ayrshire Certificate Presentation**  
October 2020 Palace Theatre (date and time to be confirmed)

**These are indicative dates and could be subject to change, without prior notice due to poor weather or supervision requirements.**

**If you can't make a training date or a date for a walk please inform a leader as soon as you can.**