



**DUKE OF EDINBURGH'S
EXPEDITION NOTES
RIDDLESDOWN COLLEGIATE**

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1. Introduction

This booklet contains a lot of information which you will find useful for your expedition. Please take the time to read through this booklet carefully, referring back to it when necessary.

The location of your expeditions will be chosen for you although you will decide the route to take and the purpose of your assessed expedition. The training which you do before you go will equip you not only to tackle this expedition, but also to plan and carry out expeditions for your own enjoyment in the future.

For the weekends to run smoothly you must aim towards the following demands:

- to give attention to detail,
- to take advice which will enable you to journey safely,
- to share responsibility for the venture and to rely upon each other and work in a spirit of co-operation,
- to take on leadership when appropriate,
- to have determination in execution of the expedition.

For many of you this is a new and challenging experience. You will each bring personal ideas to the group. Success can only be achieved if you rely on each other's strengths and build on your own weaknesses by learning from those around you. You cannot expect to be an expert at everything. Do not become frustrated. Look and listen carefully.

GOOD LUCK AND ENJOY IT!!
Miss Baker and Mrs White

Please make sure required information is given to Mrs White/Mrs Surbey in Student Services by the date indicated. This is essential to ensure the smooth running of the expeditions. Please note that we reserve the right to defer any student from taking part on an expedition provided adequate notice is given.

2. Expedition Details

Each participant must complete a practice expedition in addition to the assessed expedition. It is important that any problems or changes in details on the Annual Consent Form (which was completed via Parentpay) are referred to Mrs White by email as soon as possible.

Dates are:

Bronze Training Expedition Local Area, Camp at School	Friday 10 - Saturday 11 May 2024
Bronze Assessed Expedition Forest Row, East Grinstead	Friday 28 - Saturday 29 June 2024
YEAR 10 Silver Practice Expedition Felbridge/East Grinstead	Friday 26 – Sunday 28 April 2024
YEAR 10 Silver Assessed Expedition South Downs	Friday 27 – Sunday 29 September 2024

. The Group's Responsibilities:

1. Plan and submit a route. This must be agreed with Miss Baker before the expedition.
2. Work out transport to and from the expedition area – train times, group car lifts etc.
3. Decide on group equipment requirements.
4. Agree which parents will be “on call” and able to answer a phone and take messages throughout your time away.
5. Meet as many times as necessary, always discuss things together e.g. menus.
6. Decide on a purpose for your assessed expedition.
7. WEATHER CHECK (up-to-date).
8. Designate a FIRST AIDER in your group.

Individual's Responsibilities:

1. Attend all meetings.
2. Carry out all responsibilities.
3. Prepare your kit early, cutting down on weight wherever possible. PRACTICE PACKING (all in plastic bags).
4. Keep parents and organisers up to date with all information.
5. Read all handouts carefully. Much of the instruction is not optional, but vital! – e.g. what you wear, what you eat, how you behave on the route.
6. KEEP TO ALL DEADLINES!

When you are on the expedition REMEMBER:

- Time keeping is important for safety and enjoyment. In order to fulfil your challenge you should not cut corners or rush to finish. You may wish to take notes/pictures of wildlife/vegetation/plants etc during your expedition – make sure you do this in a safe place.
- Text or call your leader only if you expect to be significantly late to checkpoints or camp or in the case of an emergency or any major concerns you may have.
- Stick to your route (except in an emergency).
- Travel by navigation, not by asking (except in an absolute emergency). The map is nearly always right. You need to map read ALL THE TIME. Have a different leader but try to be aware of your location yourself.
- YOU ARE ENTIRELY SELF SUFFICIENT. Do not phone home. You may not ask to use people's toilets or go into shops or pubs. You may ask your leader for water refills. Take all food etc, with you.
- **AVOID WEARING JEWELLERY AND DO NOT TAKE VALUABLE PERSONAL ITEMS**
- Do not stint on food. You need plenty of carbohydrates, especially a good breakfast.
- You should not be involved with anyone else – no extra walkers (friends or dogs etc.).
- Keep together and never be afraid of telling your leader if you feel unwell or are in difficulties.

3. Kit List

This is a suggested list – do not panic! You are advised to take no more than outlined below. Consider the length of expedition, weather conditions and the physical limit of what you **can** carry. You should weigh your rucksack before the expedition and it should not weigh more than 25% of your own body weight. You will need to prioritise the most important equipment (you do not need many spare clothes)

Clothing:

Strong walking shoes/trainers with ankle support	Socks
Sweat pants or leggings (no jeans)	Underwear
Shirt (short/long sleeved)	1 Sweater or fleece
Waterproof rain jacket (preferably knee length) if required	Night clothes
Waterproof trousers if required	
Headgear (baseball cap or woolly hat)	
Plastic bags for putting everything in to keep waterproof	
Pair of flip flops/crocs style shoes for wearing in camp	

Other Items:

Rucksack – 55 - 65 litres - one which is adjustable – make sure it fits you comfortably	
Sleeping bag	2 small/medium water bottles
Karimat	Cooking utensils
Wash Kit/wipes (minimal items)	Knife, fork, spoon, cup and plate
Small towel	Torch and spare battery
Sunglasses	Any medication you need
Sun cream	
Insect repellent (optional)	

Group Items:

Tent	
First Aid Kit	Food
Toilet roll	Matches
Stoves (Trangia 1 between 2 or 3)	
Fuel bottle per stove (and methylated spirit in proper fuel container)	
If you are using a Gas stove then make sure you have enough gas to last you	
A small amount of emergency money	
Mobile Phone (for emergency contact with leaders not social calls)	





HOW TO PACK YOUR DofE RUCKSACK

GET MORE TIPS AT WWW.DOFESHOPPING.ORG/EXPEDITION-KIT.

LINER
Line your rucksack with a rucksack liner or strong rubbish sack to keep everything dry. LIFEVENTURE DRESTORE ROLL TOP BAGS.

LUNCH/FOOD
Bag each meal separately so you ration your food properly and pack your lunch for the day at the top to get at it quickly in case it is raining. BEYOND THE BEATEN TRACK BAIN MEAL.

TOP COMPARTMENT
Put in all the small items of kit you'll need during the day.

WATERPROOFS, HAT & GLOVES
Pack your bag in the order you will want your kit. Remember last in first out. CRAGHOPPERS REACTION LITE JACKET.

WASH KIT
Group and pack all kit into separate dry bags so you can find what you need quickly. LIFEVENTURE WASH HOLDALL.

TRANGIA
Clean and thoroughly dry, then place close to your back to maintain your centre of gravity. TRANGIA 25-11L STOVE.

SLEEPING/ROLL MAT
Try to get all your kit inside your bag. If you have a large roll mat, make sure it is securely tied to the outside of your bag. VANGO TREK COMPACT SELF-INFLATING SLEEPING MAT.

SURVIVAL BAG
Use up any gaps to help keep kit stable in the bag. LIFESYSTEMS SURVIVAL BAG.

FUEL
Store fuel and water vertically and double bag fuel canisters. TRANGIA FUEL BOTTLE 1L.

FLASK
Ensure you have enough water to stay hydrated. Must be easy to get to. LIFEVENTURE TRITAN FLASK 1L.

TENT
Ensure the heaviest kit is close to your back and balanced on each side. VANGO PULSAR 300.

SLEEPING BAG
Always put your sleeping bag inside another waterproof bag, or all you can to keep your sleeping bag dry. VANGO STRATO.

CLOTHES
Push spare clothes to the bottom front of the rucksack to fill the space available. CRAGHOPPERS VITALISE BASE T-SHIRT.

SOCKS
BRIDGEDALE WOOLFUSION TREKKER.

COOKING/CAMP-CRAFT KIT
The total weight of your bag should not be more than 25% of your body weight. LIFEVENTURE TITANIUM MUG & BOWL.

Kit Care

Boots:

Never wear new boots which have not been worn in on an expedition. Consult manufacturer's instructions before you treat the boots, as some boots require very little initial preparation. When treating boots remember that repeated light applications are better than one heavy application. After use wash your boots to remove any mud, stones, or old wax, and allow them to dry at room temperature. DO NOT force dry boots near a fire or other heat source.

Tents:

After your trip make sure the tent is thoroughly dry before packing it away. Wash dirt from the pegs and poles and dry them. If you need to wash your tent do not use detergent as this will damage the proofing. It is best to use a sponge and clear water.

Trangias:

Clean after each use to remove food – do not leave as much harder to remove!

Sleeping bags:

When not in use your sleeping bag should be stored loosely packed, for instance in a pillowcase or hung on a coat hanger. The bag should not be stored fully compressed, nor in a plastic bag which may cause dampness.

When travelling the bag is probably best stored in its own stuffsac. This will not be waterproof so the bag should be put in an additional strong plastic bag. When preparing to sleep lay the bag out and gently shake it until it is fully lofted.

After each night spent in the bag air it as it may have absorbed some moisture – if the tent is dry the bag can be placed, inside out, on the tent roof. Bags with full length zips should be opened out.

Sleeping bag liners can be used to help keep the bag clean, but they are additional weight and may wrap around your feet if you move a lot in the night.

Only wash sleeping bags after consultation of the manufacturer's care instructions.

4. Packing a Rucksack

Good organisation is the key to a comfortable carry. Start by making three piles of equipment: Essentials; Very Useful; Luxuries. Pack the first, deliberate on the second and be strict about the third. Remember that weight should be the deciding factor.

When packing keep the handy things you will need en route and use the side and lid pockets for these. Other equipment should be divided into light, bulky items and heavy, dense items. The heaviest items should be high up and close to your back with lighter items nearer the base and away from your back. This will reduce the need to lean forward to counterbalance the weight of the sack.

- Always pack your rucksack in reverse order:

- First In - Last Out



It may be necessary to put a thin layer of padding (i.e. spare clothing) next to your back, for a bit of extra comfort, otherwise use soft items to fill the gaps between the larger, harder items.

Things which can leak (such as fuel) and contaminate other items (such as food) should be packed carefully, preferably in an upright position, and double wrapped in plastic bags. It is important both for comfort, and in times of emergency, that all gear and clothing remains dry. Remember to take spares of things which may run out (matches, plasters, batteries etc.)

TOP TIPS

When you've packed your sack, make an inventory of what you take. When you return, note the items you used a lot, those you seldom used, and anything you left behind which you wished you had taken. The list should be stored with your gear between trips and updated after each trip to assist equipment selection.

You can cut down on weight by careful choice of food and wash bag items. Whenever possible use dry foods in light weight packaging. Only take as much toothpaste, soap etc. as you will need – take partly used tubes etc. If you absolutely cannot live without things like shampoo, invest in a sachet rather than take a whole bottle!

Remember: you will be the one who needs to find things in your bag and repack after the first night of camp so pack your own bag. Well meaning helpers should supervise your packing only.

5. Planning An Expedition Route

You will be using an Ordnance Survey Explorer Series map of the designated area. It is on a scale of 1:25000. You will need to plan a route from the start point to the campsite and from the campsite to the finish point. The route should be about 15 miles or 24 kilometres long.

At the heart of all route planning is the need to estimate how long the journey will take. The time it takes to complete a journey depends on a number of factors:

1. The physical fitness of the party
2. Weather conditions
3. Conditions under foot
4. The distance to be covered
5. The height to be climbed

We have most control over the distance to be covered and the height to be climbed so in calculating the length of time for a journey the following rules should be applied:

**Allow 15 minutes per km or 20 minutes per mile of horizontal distance.
Allow a further 1 minute for each 10m height to be climbed.**

(Height descended should be ignored.)

In addition it is normal practice to add 10 minutes per hour for a 'breather' although this can also be used as 'recovery time' to catch up with the schedule. Additional time should also be added on for meals or time needed to fulfil the purpose work of the expedition.

PACE

You may find that the slowest walker will lag behind. Do not fall into the habit of stopping and waiting for them to catch up, then as soon as they do you march on again. Instead, bring them nearer the front of the group and set the pace to fit theirs. You may find that they will walk slightly faster – but do not push them excessively. This only creates friction in the group.



The practice journey should be used to sort out any modifications to timing that a group may experience.

A good place for a rest stop should be:

- Sheltered from wind, rain or sun.
- On flat ground – easier to start up again.
- In clear view of the area – a good opportunity to check the map and establish where you are. Use the stop to locate a good spot on the map for your next break.
- An opportunity to take in some food and water.
- A chance to add or remove clothing – be alert to your body heat.

The Route Card

This is an important document as it expresses the intentions of the group; where it is going and when. When planning the route use a route card to record the details of the route. Use the contour lines and spot heights to check if your route is taking you up hill or down hill. You must try to stick to your planned route as closely as possible.

Each day's journey should be split into between 4 and 8 sections or 'legs'. These legs should split the journey into natural divisions if possible and should be marked by the principal check points or where major breaks are to be taken during the day. A copy of the route card must be given to members of staff before you start as they will arrange to meet you at suitable points during the day.

ALWAYS WAIT AT ARRANGED MEETING POINTS UNLESS YOU HAVE MADE ALTERNATIVE ARRANGEMENTS WITH THE LEADERS BY MOBILE PHONE.



Before you set off you may decide to elect a leader. It is not a good idea to put all your trust in this person and let them march on ahead with you following behind. During the expedition you must take into consideration the needs of each individual in the group. Do not let the slowest person hold you up, but do not resort to yelling at them – this will not make them feel any better and nor will it encourage them to walk any faster.

EVERYONE should have the opportunity to lead and read the map.

REMEMBER THAT YOU ARE OUT IN THE COUNTRYSIDE TO ENJOY YOURSELVES !!

6. Navigation

Routes should make as little use of roads as is possible and every effort should be made to avoid villages, where practicable. All route finding should be based on the map. You should not need to rely on a compass for your Bronze expedition.

Remember on a 1:25000 map:

4 cm on the map represents 1 kilometre on the ground.

At the Bronze level you are required to cover a minimum of 24 kilometres (15 miles).

Map Skills

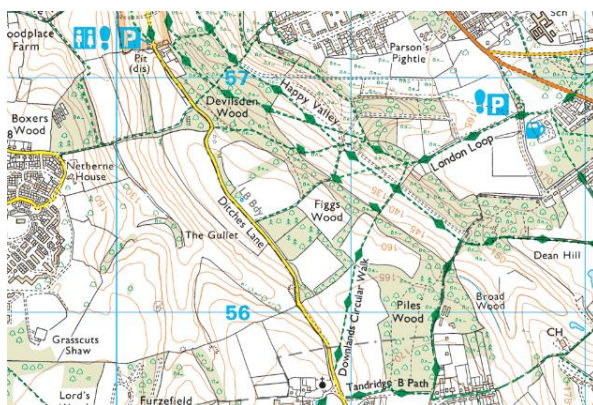
You will receive training for some map skills. You must make sure you are familiar with the following:

1. Scale and distance, measuring distance, distance and time.
2. Conventional signs – using the Key.
3. Grid reference numbers.
4. Contours and gradients.
5. Map direction.
6. You must be able to give a verbal description of a route linking two places. Consider the route card on your practice walk.

Practical Map Skills

On your day walk you should have had the opportunity for the following:

1. Setting the map by inspection.
2. Locating position from the map.
3. Determining geographical direction and direction of travel from the map; checking the direction of paths using the map.
4. Identifying features in the country by using the map.
5. Locating features marked on the map in the countryside.
6. Following a planned route.



You will receive further training on writing a route card.

7. The Country Code

The main spirit of the Country Code is that your presence in the countryside should have no significant or lasting effect. It is important to avoid unnecessary noise and not disturb the rural communities through which your route may take you.

An understanding of the spirit and content of the Country Code and practical observance of its terms is an important part of an Award Venture. Assessors will be as careful to watch for infringements of the code as they will be to watch for faulty route finding and poor tent pitching.



- 1. Enjoy the Countryside and Respect its Life and Work**
The public is in trust in the countryside. Respect the property and the livelihood of the countryman. If the opportunity occurs try to explain your purpose to the local farmer and thank him for his co-operation.
- 2. Guard Against all Risk of Fire**
Permission must always be obtained before lighting a fire. If a fire is used for cooking, or as a campfire, care must be taken to remove turf first. The fire should be extinguished carefully and allowed to cool before returfing. If a party discovers a fire, efforts should be made to stamp it out or, if the blaze is too large for the group to deal with, help should be obtained from the Police, Fire Brigade or Forestry Commission Officers. Reporting and helping to fight a heath or forest fire would be a very acceptable reason for a change of expedition plans.
- 3. Fasten all Gates**
A gate should be walked through and not climbed over. The last person in the group should carefully re-fasten the gate.
- 4. Keep Your Dogs Under Close Control**
Dogs are not allowed on your expedition.
- 5. Keep to Public Paths Across Farmland**
In the more cultivated areas of the country, footpaths must be followed carefully. On narrow paths keep in single file.
- 6. Use of Gates and Stiles to Cross Fences, Hedges and Walls**
There is seldom any excuse for crossing a wall or fence by any other way than by the stile or gate provided. Being on an Award Scheme venture is a reason for making a detour to avoid damaged walls, etc. not a reason to take short cuts.

7. Leave Livestock, Crops and Machinery Alone

8. Take Your Litter Home

All camp litter must be removed from the site and deposited in a way-side litter bin when next possible. It should not be buried or left for your leaders to pick up! Always spend a few moments for a last check of any stopping point – you'd be surprised how many tent bits are found this way !



9. Help to Keep all Water Clean

Many rural communities use stream water direct. Washing-up should be done away from the stream and grease and fat poured into the earth.

10. Protect Wildlife, Plants and Trees

Remember that there should be little or no evidence of the fact that an expedition has passed through or camped in an area. When deciding on the purpose of your expedition, bear in mind that many plants are protected by law and should NEVER be picked.

11. Take Special Care on Country Roads

These are usually narrow and winding and should be avoided wherever possible. If it is necessary to use them for short distances keep to the right and walk in single file.

12. Make NO Unnecessary Noise



8. Basic First Aid

You will receive basic first aid training before your practice expedition. It is recommended that each individual should carry his or her own first aid kit rather than there being a communal kit for the whole group. Each kit must include any medicines or treatments which the individual needs for conditions such as asthma, together with antihistamines and painkillers. It is useful for someone to take overall responsibility for dealing with injuries.

You should have notified any medical conditions on the Parental Consent Form (done when payment made on Parentpay or on form given to you. Please advise Mrs White by email if these details change.

Please note that members of staff cannot administer drugs of any description including over the counter medicines.

Most expeditions into the countryside run smoothly. If you take personal responsibility for acting sensibly and being aware of your personal limitations, then accidents can be alleviated.

Basic Injuries

You should all know how to deal with the following basic injuries:

- Blisters, cuts, abrasions, minor burns and scalds, headaches, insect bites, sunburn, splinters, foreign bodies in the eye, nose and ear.
- There are also a number of asthma sufferers amongst the groups. If you suffer from asthma it is important that other members of your group are aware of it and know what to do if you have an attack. If you use an asthma pump make sure that it is always easy to get to and that at least one other member of your group knows where to find it. It is advisable to carry a spare.

More Serious Conditions

You will receive training on the treatment of these conditions

1. Sprains, dislocations and broken limbs.
2. Stopping bleeding, treatment for shock.
3. Expired air resuscitation.

If an accident does occur then you need to know how to cope in the emergency. The Safety Precautions training will outline exactly what to do.

CALMNESS AND SENSIBLE DECISION-MAKING WILL HELP TO REDUCE THE INCIDENT. REMEMBER THAT IN THE CASE OF ANY EMERGENCY, YOU CAN CONTACT LEADERS BY MOBILE PHONE.

First Aid Kit

First Aid Kits are best kept in a plastic container. Good quality containers are practically airtight and waterproof, and will assist in keeping the contents dry and sterile. Basic materials for an individual first aid kit are:

- 10 adhesive dressings (plasters) in assorted sizes,
- Blister plasters
- A medium-sized sterile unmedicated wound dressing,
- Two or three individually wrapped moist cleaning wipes,
- Melolin squares (or similar) 10 x 10cm or 5 x 5cm,
- 1 crepe bandage,
- Tubigrip
- Zinc oxide or micropore tape
- Chiropody felt or moleskin
- A small pair of scissors
- A pair of disposable plastic gloves
- Sun block or high factor sunscreen

The group should also keep a small booklet and pencil. In the event of having to administer medication or medical aid a full accurate written account must be made.

The following information should be recorded:

Name

Incident details

Treatment given – Type of medication, dose, frequency (times)

Date

Place where treated

Who treated the casualty

If, in the extreme event, the medical emergency services need to be called, the above information should be passed on.



Treatment of Minor Conditions

Minor cuts and abrasions

These usually require little more than cleaning and an adhesive dressing. Micropore tape is particularly effective and keeping dirt out of small cuts whilst allowing the wound to 'breathe'.

Minor burns and scalds

These may occur while cooking and usually arise from hot pans or the spillage of boiling water. Treatment is by immediate immersion in cold water (or any other cold liquid such as milk or lemonade) for at least ten minutes before applying a sterile dressing. Always notify a member of staff.

Blisters

This is likely to be the most common complaint and is easier avoided than treated. The chances of blistering can be reduced by ensuring that footwear is well broken-in before the venture. Care should be taken to ensure that there are no wrinkles in the socks when they are put on. In hot, dry conditions walking in trainers with one pair of socks will do much to keep blisters at bay.

Blisters are caused by friction as a result of material rubbing against the skin. The first indications are a warming of the skin in a particular area with increasing soreness. At the first signs of discomfort footwear should be removed, even though it will bring the group to a halt. The affected and surrounded area should be covered with thin chiropody felt or moleskin to reduce friction.

It is worth investing in some blister plasters which will protect the blister, ensure that the area remains sterile and help it to heal. Under no circumstances should you burst a blister as the area is likely to become infected and will be more painful. If necessary or concerned, seek the advice of staff.



Headaches

These are common, particularly in hot weather. Treat with paracetamol or other analgesic tablets and if possible have a lie down in the shade with a cool cloth on the forehead.

Exposure to Sun and Heat

Always drink plenty of water – in hot weather staff will top up your water bottles regularly so do not skimp on water rations. Note that salt is lost in sweating and must be replaced. Always ensure that members of your group eat breakfast to avoid delays due to feeling faint later. Never undertake physical exertion on an empty stomach!

Avoid sunburn by covering up with loose-fitting light clothing and using a high factor suncream on exposed parts. Avoid sleeveless and cropped tops. For groups on the move, especially when there is a breeze, the burning takes place unnoticed until it is too late and the damage done. If shorts are worn, the calves and backs of the knees are particularly vulnerable so apply cream frequently or better still, cover up. Protect the back of the neck using a spare t-shirt if possible and always wear a hat such as a baseball hat to protect burning of the scalp.

If a member of your group feels dizzy, giddy or faint with a rapid pulse rate, often followed by a headache or feeling of nausea this signifies the onset of heatstroke which is a more serious condition. Take immediate shelter in the shade, lie the patient down and slowly cool them down with cold water. Allow them to sip plenty of cold water or other drink, with a pinch of salt added to replace body fluid. Contact a member of staff on the mobile phone.

Insect Bites

Midges can be a problem on summer evenings, especially in the sheltered places where lightweight campers choose to pitch their tent. Avoid pitching your tent close to trees or bushes. Midge bites can be avoided using an anti-midge cream containing diethyltoluamide as the active ingredient. If bitten treat the area with antihistamine cream. Cool the area down to reduce irritation and avoid scratching which will break the skin and could cause infection. Adverse allergic reactions and swelling can be treated with hayfever tablets such as piriton and allereze.

Sprains

Sprained ankles happen, even to the most careful walker and the torn tissue swells immediately. If the ankle is covered by the boot, do not remove the boot as this will help to contain the swelling and you may not be able to replace the boot on the swollen foot. Frequently it is sufficient to rest for a while until the pain eases and then it may be possible to proceed, assisted by a stick or a shoulder to lean on. If there is a stream or water nearby immersing the foot, complete with boot, may help to reduce the swelling and ease the pain. If the ankle is not covered, then a crepe bandage, soaked in cold water and tied in a figure of eight over the shoe and ankle will help to reduce the swelling and provide a little support. Staff may be contacted if the person is convinced they are unable to proceed.

9. Camp Craft

This element of the training will again not only equip you to prepare for this expedition, but it will also help you to plan adequately for other ventures into the countryside.

Camp craft divides into two parts:

- The provision of shelter
- The provision of food

The provision of shelter

A 2-man or 3-man tent is preferable. Remember the tent needs to be divided up fairly between the people using it.



You will be camping at an established site which provides fresh water and sanitation. Your main concern will be that you have pitched your tent correctly.

Whenever possible pitch your tent on reasonably level ground avoiding uneven terrain such as tree roots or mole hills. If the tent has to be pitched on a slope, then it is better to sleep with the feet facing downhill. Objects which may puncture the ground sheet must be removed, and anything that can be done to improve the surface will increase the chances of a good night's sleep; you may well lie awake all night wishing you had devoted more attention to the ground you are sleeping on.

The tent should normally be pitched with the entrance facing away from the wind unless it is pitched close to a windbreak such as a hedge or line of trees. Tents should not be pitched immediately under trees. Pegs should always be driven into the ground up to the hilt and at an angle of 45° to the surface of the ground with the head away from the tent.

Tents should be pitched at least 2m apart.

It should not take two people more than 15 minutes to put up a tent.

Remember: Before leaving a site, search the ground to ensure that it is clean and free from all litter, including food waste. Make sure that no pieces of equipment such as pegs have been left behind.

The Provision of Food

The task for expedition catering is to cram the greatest amount of energy into the lowest weight and bulk. This is best achieved by increasing the amount of carbohydrates (sugars and starches) and fats, and by using dehydrated food. If too much food is carried, weight will be a handicap; too little food will result in hunger and physical efficiency will be impaired.

As a rough guide:

- Simple carbohydrate – the sugars – provide energy very quickly.
- Complex carbohydrates in the form of rice, pasta, bread etc. supply energy over the medium term.
- Fats provide energy over a longer period of time.

Only take foods which:

- Contain the greatest amount of energy in the smallest weight and volume.
- You and all your cooking partners enjoy.
- Are simple to prepare 'one-pot meals', such as stews, curries and pastas.
- Cook quickly to save fuel.
- Will keep, especially in hot weather.

Supermarkets stock an endless variety of dehydrated foods and meals. The packaging of these products in foil or plastic is airtight and durable, usually waterproof, and stands up very well to buffeting of expeditions. Check how long the food takes to cook as you must carry enough fuel to cook it. Look out for instant soups, pre-cooked noodles, rice and pasta which only take five minutes to prepare.



Always remember to have plenty of food and drink before setting out each morning and drink as much as possible as soon as possible on arrival at the campsite in the evening. . Members of staff will top up water bottles when they meet groups – this is normally every couple of hours.



DON'T FORGET – COOKING UTENSILS AND CLEANING MATERIALS

Cooking Stoves

The greatest care and discipline must be exercised at all times when using stoves as the accidents which occur are invariably the result of carelessness and the failure to follow a few simple rules which must always be obeyed.

You are most likely to use a spirit stove or Trangia (commercial name). They are light and compact, with the stove and the canteen all packing together in a single unit. They are stable with their broad base and moderate height and do not scorch the grass. You may also use a small gas cooker but please ensure you have enough gas for the group for the whole expedition.

The dangers arise from the fuel. **Methylated spirits is highly volatile, has a low flash point and in strong sunlight burns with a virtually invisible flame.** There have been instances when fuel has been added to a stove which was still too hot or the spirit has been added in strong sunlight where the practically invisible flame has not been detected. Such action may lead to the fuel container catching fire and acting as a flame thrower.

Safety Routine:

- Stoves must not be filled from a bulk container such as a one gallon can or plastic container.
- The spirit must be carried in one or more bottles specifically designed for the purpose. These should normally be around half a litre in capacity and the stoves should be filled from these bottles.
- One person should carry the stove downwind, away from the tents and it should be fuelled or refuelled, in a place where there are no naked flames in the vicinity. The screw cap on the spirit bottle must be replaced immediately and the bottle returned to a safe place. Some bottles specifically designed for carrying fuel have a pouring hole in the screw cap which only needs to be slackened to fuel a stove.
- Do not refill a stove until you are sure that the flame is completely extinguished and the stove has cooled. If the stove is too hot to handle, then it is too hot to be refuelled. If in doubt ask a member of staff first.
- The stove must be placed on a firm level surface, at least one metre away from the tent, in a place where it cannot be knocked over.

A towel soaked in water will make a very effective fire blanket. Methylated spirits and water may be mixed so there is no danger of a fire spreading; the water simply cuts off the air supply and cools and dilutes the spirit.

10. Weather

Weather is by far the most important factor outside our control which will determine the success, or otherwise, of our ventures. Suitable clothing and equipment is vital in shielding us from the elements.

It is essential, for both success and safety to have an up to date weather forecast before setting out. Every effort should be made to watch a weather forecast, especially on the BBC, for several days prior to the departure. This will enable you to build up an understanding of the general weather situation and weather patterns.

ALL VENTURES CAN BE MADE MORE COMFORTABLE AND PLEASANT BY ANTICIPATING WHAT IS GOING TO HAPPEN WEATHERWISE.

The important factors in weather in terms of your expedition are:

1. Temperature and rainfall

Carrying out a venture in extremes of temperature, whether hot or cold, may make travel very difficult. Rain poses problems because it destroys much of the insulation provided by dry clothing, but this can usually be overcome by the use of protective overclothing.

2. Wind

The speed or strength of the wind exacerbates the effects of rain and low temperatures. Strong winds give rise to driving rain which can penetrate clothing and equipment and render ineffective, or damage, unsuitable or poorly erected tents. Wind lowers the effective temperature drastically – the wind chill effect. Changes in wind direction usually lead to changes in the weather.

3. Cloud coverage

A cloud covered sky acts as a blanket, reducing the loss of heat from the earth's surface. This keeps the temperature up during the night. A cloudless overnight sky usually results in a cold night dew or even frost in Spring and Autumn. Blanket cloud usually means warmer camping, though thick, low cloud cover frequently brings heavy, prolonged rain resulting in wet camping and travelling.

4. Cloud height

In general, a rising cloud base tends to indicate an improvement in the weather, while a lowering cloud base usually means that the weather is closing in.

5. Air pressure

In weather forecasts, areas of high pressure tend to be slow moving and lead to dry weather whereas areas of low pressure move quickly and tend to consist of a series of 'fronts' bringing wet and sometimes windy weather.

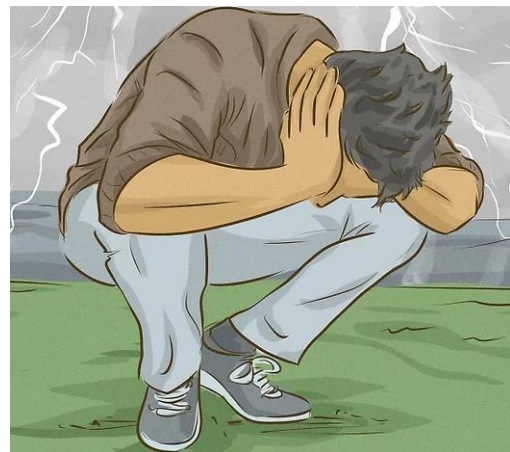
6. Humidity

The effects of high humidity are very obvious making physical exertion a sweaty, sticky process. High humidity coupled with heat can increase the likelihood of heat exhaustion and at best lead to increased fatigue. This combination plays a significant role in the formation of thunderstorms.

Thunderstorms

When accompanied by heavy rain, these frequently give rise to flash flooding which can present a very serious danger. Streams and rivers should be avoided and you should examine your route carefully to assess potential dangers.

Thunder and lightning can occur at any time of the year and at any time of the day or night. The South East of England is particularly prone during spells of hot, humid weather. The vast majority of people struck by lightning are engaged in outdoor pursuits but a number of effective steps can be taken to reduce the risk of being struck by lightning. The distant roll of thunder and the large cumulonimbus cloud warns of an approaching thunderstorm.



Lightning strikes are usually directed towards the highest ground under the cloud, or to prominent objects on the ground such as trees, buildings or people. If possible, retreat to lower ground, keeping well away from trees, especially isolated ones. If you are in a forested area try to move to a clearing or an area where the trees are not as tall or are on lower ground. If you are out in the open, head for the lowest ground or a depression and sit, but do not lie, down. Put on your waterproof clothing and sit on your sleeping mat or rucksack, with your feet tucked as closely under your body as you can, with hands folded in front of you.

11. SAFETY PRECAUTIONS

You should never be too far away from civilisation. There are three essential duties to ensure the safety of your group:

1. Tell people where you are going and when you expect to be there.

Route cards should be completed accurately, copies left with supervising staff and most importantly, kept to.

2. Always Keep Together.

The group must always keep together. It must not split or allow anyone to get left behind. When some members of the group are slow this requires enormous self-discipline by the rest of the party. Aim to increase motivation rather than chastise. One of the main purposes of practice journeys is in sorting out this problem. The only exception to this rule is when there is an emergency and help has to be sought.

3. Always tell the person responsible that you have returned safely.

Keep leaders informed of your movements. If you are late arriving make sure a member of staff is notified of your arrival – people may be out looking for you. Keep leaders informed of any significant delays to check points.

EMERGENCY PROCEDURES

In the event of an accident or injury give immediate first aid treatment if required. Stay calm, try not to panic. The casualty may be able to struggle on, with assistance from other members of the group, to a place where help or medical assistance can be obtained. The most difficult decision arises when the patient is unable to move. The group may have to split up to enable two participants to fetch help. Before taking this drastic step it may be possible to obtain assistance from other walkers, members of the public or contact leaders by mobile phone.

Immediate Action:

- Check yourself and your companions.
- Give first aid treatment if required. Record treatment given and note the condition of the casualty.
- Put on appropriate clothing. Protection from the cold is vital for survival. Keep warm. Avoid sweating. Keep out of wind. Huddle together.
- Consolidate survival and other useful items.
- Seek or construct temporary shelter. Protect yourself.
- Relax, formulate a plan and be prepared to wait.

Fetching Help

Splitting a group up is a drastic step and certain procedures must be followed:

- Decide which two people are going to fetch help – usually the best navigator and a fit member of the group.
- Communal camping gear must be redistributed so that a complete tent is left behind for shelter.
- Ensure that a stove, fuel and an ample supply of food remains with the injured and companions.
- Those fetching help should retain their own emergency equipment.
- Where possible, at least two people should stay at the scene of the incident.
- The location of the incident must be carefully determined on the map and the grid reference noted.
- Decide from where to seek help and plan the route.
- Everyone should know the grid reference, the position and where help is to be sought.
- Prepare a written emergency message.

Emergency Message

This must contain the following information:

- The location of the incident with grid reference and a description of the location.
- The time of the incident.
- The name(s) of the injured.
- The nature of the injuries.
- The number and names of the rest of the group.

Waiting for help to arrive

The people left behind have a vital role to play. They should erect the tent or improvise a shelter. The casualty must be kept warm and insulated from the ground. Warm drinks can only be given to a casualty not likely to require an anaesthetic. Above all, the patient must be cared for and reassured. The site can be made more visible by attaching a triangular bandage or brightly coloured garment to a stick or wall where it may flutter in the wind.

Final Thought

When a group fails to reach its destination people will become concerned about its safety and a search may be initiated. Even in the worst weather it is important to make locations more visible and keep a look out for searchers; whistles and torches should be kept to hand. Improvisation, the maximum use of all the equipment and resources available coupled with determination, will enable participants to bring about a successful resolution of all their difficulties.

Preserve your mobile phone batteries by only making essential calls to supervisors.