A.8 KIT LISTS AND INFORMATION

Edited by Tony Land from many sources with particular help from Felicity Aston (July 2007)

All items on this list are useful, but everybody has different priorities and your needs will depend on the conditions, environment and specific situation of your expedition. There are no hard and fast rules. There will be items listed that you will not need and you may think of other things that you must take but which are not on this list. Remember too that although serious expense can be involved many items (including rucksacks and sleeping bags) are invaluable in student days and should last at least half a lifetime.

You should also look at the chapters in this Guide which cover particular environments.

YOU must decide what to take. This Kit list is advisory (as are any quantities mentioned) and is meant as a guide only not a tick sheet. You must make your own list tailored to your expedition and your needs.

Advice about specific items of equipment is given at the end of the list but here are some general points that you might want to bear in mind when preparing your own kit list:

1. Be clear about the environment, climate and conditions you need to be prepared for.
   For example, in the Arctic the weather is usually cold, temperatures can fall well below freezing and wind chill can make you feel much colder as you would expect, but you also need to be prepared for warm temperatures. During the day in July and August the sun can be hot and you will need good sun protection on the glaciers.

   In deserts it can be very cold at night, and sometimes during the day in winter. It may also be very dusty. In desert and savanna environments thorns are a menace to clothing and you should not take expensive and unnecessary garments.

   In jungles constant damp and leaches are serious considerations and different kit is required to deal with them [see the excellent article in the Geographical magazine for May 2007].

2. If your expedition is in a remote area and you will be in the field for extended periods of time without the opportunity to replace anything, it is essential that your equipment is in adequate and sound condition. Think about what spares you may need.

3. Respect local sensitivities: in some places wearing shorts or having bare arms as well as legs may cause offence (as well as leaving one open to attacks by insects and sunburn).

4. Remember that it is often possible to borrow items of equipment that you do not have. Ask the member of staff at your school/college/university responsible for Outdoor Pursuits, your cadet or venture scout unit, your Duke of Edinburgh Award Officer or your local outdoor pursuits centre as well as friends and family if they are able to help by lending you equipment. Sometimes local outdoor shops donate clothing and equipment or offer a cheap price for end of line goods and don’t forget boot sales, charity shops and army surplus stores. However, it is not worth accepting unsuitable kit, even if it is free. Inspect everything critically and suspect cheap and shoddy gear.

5. Try out all your clothing and equipment in good time before the expedition, particularly footwear, to ensure that the combination of gear you have chosen works for you, in all weathers.

6. Make sure you look after you equipment. Some tents packed away damp do rot, dirty boots do go hard.

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7. As a general rule minimise your kit as much as possible - ‘if in doubt, leave it out’.
8. You may be carrying all your equipment, over rough terrain, for several days at a time, without the opportunity to offload unessential items so it is important that you only take what you really need. You may also need to leave room to carry group kit such as rations, tent parts, stoves, fuel and science or climbing gear.
9. If you are travelling to a remote or environmentally sensitive area there may be little or no opportunity to dispose of rubbish so that everything you take, including packaging, will have to be carried out with you and perhaps returned to the UK. With this in mind try to reduce un-necessary packaging.
10. Mark all your kit clearly as there is likely to be a lot of similar kit around. Mark items with your name rather than colours unless you have pre-arranged who has which colour.
11. Several different layers of clothes are much better than a few thick clothes, and zips to regulate ventilation are often preferable to over-the-head clothes.
12. If you decide to buy equipment give some thought to what kind of outdoor activities you might take part in after the expedition. This will often help you decide what to buy since most of the kit you use on the expedition will be used again and again for other trips, GAP adventures and student sleepovers.
13. Remember to take a clean set of clothes to leave at base camp or other convenient location for travelling home - as much as a courtesy to other travellers as for comfort!
14. Do not have unsecured straps on your rucksack when travelling by aeroplane.

MATERIALS
Nowadays man-made fibres provide alternatives to the traditional cotton and wool fibres. To some extent personal preferences are important and many experienced explorers still prefer cotton clothing and woollen socks. With many garments made of synthetic fibres or mixtures such as polycotton which “wick” sweat away from the body now available, your best bet is probably to study catalogues and magazines and then discuss your needs at a good outdoor shop. Ask especially about modern SOFT SHELLS which are technologically advanced items between fleeces and waterproof jackets. TRAIL Magazine has a very useful annual Gear Guide and all the outdoor magazines have reviews of equipment (including boots as well as clothing and equipment).

THE KIT LISTS
More information and advice is given at the end of the list about items marked with a *

<table>
<thead>
<tr>
<th>Travel Documents</th>
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<tbody>
<tr>
<td>Passport</td>
<td>10-year passport is sometimes required, always valid for at least 6 months after return date and having some blank pages if visas are required. Keep photocopies of the details.</td>
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</table>

<table>
<thead>
<tr>
<th>Insurance Documents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>European Health Insurance Card</td>
<td>If travelling within the European Union</td>
</tr>
<tr>
<td>Visa</td>
<td>Make sure you have this well in advance of departure if it is necessary</td>
</tr>
<tr>
<td>Tickets</td>
<td>If using e-tickets bring your reference number and have a copy.</td>
</tr>
<tr>
<td>Money*</td>
<td>Don’t bother to take travellers cheques, particularly in remote areas.</td>
</tr>
<tr>
<td>Credit/debit card</td>
<td></td>
</tr>
<tr>
<td>Address Labels</td>
<td>For postcards/letters to sponsors, friends and family</td>
</tr>
<tr>
<td>Driving licence</td>
<td>and International Driving Certificate if necessary</td>
</tr>
<tr>
<td>Vaccination records</td>
<td>and certificates</td>
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</tbody>
</table>
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**Spare passport photographs**

Consider leaving a set at home in case of real emergencies. (You can scan and save documents on the web and retrieve them from any e-mail cafe – or have them e-mailed to you).

**Bags / Packing**

**Rucksack**

65-80 litres with an adjustable harness and waist belt

**Rucksack Liner**

A heavy duty plastic bag (e.g. fertiliser sack) will do fine

**Polythene Bags**

All shapes and sizes, stuffed in corners. Zip-lock are useful

**Stuff-sacks**

To separate clothes and keep kit organised

**Bungi Cords / webbing straps**

Useful for strapping kit to rucksack (but not on aircraft).

**Waterproof wallet & money belt for security**

**Small Plastic Containers**

To keep small items safe and dry (e.g. curry powder, batteries, paracetamol)

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**Sleeping**

**Tent**

(or possibly hammock in jungles)

**Sleeping Bag**

Must be kept dry, especially down sleeping bags.

**Sleeping Bag Liner**

Cotton, silk or nylon - keeps your sleeping bag cleaner and warmer

**Sleeping Mat**

Full length closed cell foam or inflatable type. A Thermarest is a modern alternative.

**Bivvy Bag**

Great if you can beg, borrow or make one when appropriate

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**Outer Layer**

**Boots**

The MOST important item of kit. Make sure they fit and that you really wear them in. Take spare laces.

**Gaiters**

Tough, with velcro (not zips) or clip-on style. Useful in jungles too.

**Waterproof Jacket**

Robust with large map pocket, storm cuffs and a wired hood.

**Waterproof Trousers**

¾ length leg zips are worth having.

**Lighter cagoule**

Appropriate in some situations

**Hat / Balaclava**

In cold areas it should be warm and big enough to cover your ears. In sunny areas like deserts it must have an all-round wide brim (neck flaps are useful too). Take a spare.

**Scarf / Buff**

Cotton for hot climates, wool, silk or fleece for cold ones

**Sun Glasses**

Quality UVA and UVB block with side protection from glare

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**Base/Inner Layer**

**Thin socks**

Thin with flat seams. Merino wool is excellent. to use as a liner

**Underwear**

Avoid seams that could chafe and underwired bras, and bra clips under rucksack strap (consider sports bras)

**Thermal top**

In cold climates: take at least two. Long or short sleeved.

**Thermal Long-johns**

Make sure they are quick drying e.g. Helly Hansen Lifa’s

**Inner Gloves**

For fiddly work and extra warmth in cold environments.

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**Middle Layers**

**Thick socks**

At least two pairs, cushioned with no uncomfortable seams - e.g. loopstitch varieties. See note on Materials.
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<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>Trousers</td>
<td>Rugged, lightweight, pockets, quick drying and not too tight. Ones with zip-off legs can be useful in hot climates.</td>
</tr>
<tr>
<td>Long sleeved shirt</td>
<td>Lightweight with collars and cuffs to keep out bugs, prevent sunburn and provide adequate modesty when required.</td>
</tr>
<tr>
<td>Fleece</td>
<td>One thin and one thicker helps with layering</td>
</tr>
<tr>
<td>Trainers/sturdy sandals</td>
<td>Alternative footwear for camp and river crossings.</td>
</tr>
<tr>
<td>Swim Wear</td>
<td>In most cases undies and a t-shirt can double for swimming</td>
</tr>
<tr>
<td>Travelling Clothes</td>
<td>Keep clean for the return journey</td>
</tr>
<tr>
<td><strong>Camping</strong></td>
<td></td>
</tr>
<tr>
<td>Stove*</td>
<td>Multifuel MSR’s are a popular choice - always consider availability of fuels and take appropriate fuel containers.</td>
</tr>
<tr>
<td>Cooking pans</td>
<td>Lids are essential. Take at least 2.</td>
</tr>
<tr>
<td>Thermos</td>
<td>1 litre. Good for hot drinks or keeping water liquid in extreme cold (or cool in hot climates).</td>
</tr>
<tr>
<td>Mess tin</td>
<td>Army-type are unbreakable. Plastic dog bowls don’t tip over.</td>
</tr>
<tr>
<td>Mug</td>
<td>Thermal mugs keep things warm, know their capacity</td>
</tr>
<tr>
<td>Knife, fork &amp; spoon</td>
<td>Strengthened plastic are lighter than metal</td>
</tr>
<tr>
<td>Pen-knife</td>
<td>Preferably with good blade, scissors and tin-opener. Pack in your main rucksack for aircraft travel, not hand luggage.</td>
</tr>
<tr>
<td>Tin-opener</td>
<td>If your pen-knife doesn’t have one. Tie onto some string.</td>
</tr>
<tr>
<td>Water bottle</td>
<td>1 litre, strong plastic or metal (e.g. Nalgene, Sigg, Platypus system)</td>
</tr>
<tr>
<td><strong>Water purification</strong></td>
<td>Tablet form or a portable filter system</td>
</tr>
<tr>
<td>Pot Scourers</td>
<td>A small one will do</td>
</tr>
<tr>
<td>Brush, small</td>
<td>Type that comes with a dustpan. Very useful for brushing off snow and removing dust from zips. Share it.</td>
</tr>
<tr>
<td>Sponge</td>
<td>For mopping up spillages but a small one will do</td>
</tr>
<tr>
<td>Screw-top containers</td>
<td>For jam, sugar etc</td>
</tr>
<tr>
<td>Disposable lighters</td>
<td>Take several</td>
</tr>
<tr>
<td>Repair Kit</td>
<td>Mini sewing kit, assorted spares, safety pins, superglue, etc</td>
</tr>
<tr>
<td>Gaffa Tape</td>
<td>Heavy, but good for emergency repairs and holding comped in place.</td>
</tr>
<tr>
<td>Superglue</td>
<td>Has dozens of uses</td>
</tr>
<tr>
<td>Clothes pegs</td>
<td></td>
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<tr>
<td><strong>Toiletries etc.</strong></td>
<td></td>
</tr>
<tr>
<td>Bag</td>
<td>A small stuff-sack will keep everything together</td>
</tr>
<tr>
<td>Soap, gel, shampoo</td>
<td>in very safe containers</td>
</tr>
<tr>
<td>Towel</td>
<td>Small travel towel (eg.Lifeadventure's Micro Fibre towel) or a large face flannel may do.</td>
</tr>
<tr>
<td>Wetwipes</td>
<td>Convenient for freshening up</td>
</tr>
<tr>
<td>Antibacterial handwash</td>
<td>The type that doesn’t need water to keep things hygienic</td>
</tr>
<tr>
<td>Fabric wash</td>
<td>Small bottle of biodegradable clothes wash</td>
</tr>
<tr>
<td>Toothpaste</td>
<td>Take the smallest tube you can find - it will be enough.</td>
</tr>
<tr>
<td>Toothbrush</td>
<td>Manual and small</td>
</tr>
<tr>
<td>Tampons/Sanitary towels*</td>
<td>Carry in a waterproof (e.g. zip-lock) bag</td>
</tr>
<tr>
<td>Spare Glasses</td>
<td>Carry in a robust case. Contact lens wearers should take a pair of glasses too.</td>
</tr>
<tr>
<td>Contact lens fluid</td>
<td>Change lenses as little as possible. Take spare lenses.</td>
</tr>
<tr>
<td>Contact lens fluid</td>
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</tbody>
</table>

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N.B. do NOT take contact lenses into deserts where dust can cause severe eye problems.

Personal Toilet Paper  Keep in a waterproof (e.g. zip-lock) bag and have a system for carrying used paper out of the field.

Comb/hairbrush  Useful for going home

Pocket Mirror  Not just for vanity, useful for checking for facial injuries (eg frost-nip). Some compasses have an integral mirror.

Shaving Gear  If only for going home

Medical
The expedition Doctor will usually supply an emergency medical kit but check beforehand what is in it if you have any concerns. It is useful to take a small supply of standard items with you. Always keep the dosage directions and information of any drugs with your kit and clearly labelled. If you require any specific medication make sure you discuss this with the expedition doctor in good time before the expedition.

Prescription drugs  Any you are already taking, with an ample supply and the instructions (which you might have to show at customs posts).

Inhalers for asthma users  With spares

Pain killer  Preferably Paracetamol (or Asprin/Ibuprofen)

Imodium for diarrhoea  Only for use when travelling in vehicles: it is not a cure!

Aloe vera lotion  For sunburn, itchy rashes etc.

Sun Screen  High factor UVB and UVA protection. Screw lids are more secure

Moisturiser  Intensive for chapped or dry skin (eg E45, Neutrogena)

Lip Balm  With sun-screen (do not share it and its germs with others)

Foot Powder  Fungicidal (eg Mycil)

Antiseptic Cream/Tea  For cuts, grazes, chafing and chapping

Tree Oil  For use in Africa

Sun Screen  High factor UVB and UVA protection. Screw lids are more secure

Moisturiser  Intensive for chapped or dry skin (eg E45, Neutrogena)

Lip Balm  With sun-screen (do not share it and its germs with others)

Foot Powder  Fungicidal (eg Mycil)

Antiseptic Cream/Tea  For cuts, grazes, chafing and chapping

Zinc Oxide Tape  As wide as possible for blister prevention (not elastoplast)

Steristrips  For bad cuts

Insect Repellent  Try ones with 50% DEET.

Fungicidal cream  (eg Canestan) Important if you are prone to thrush

Throat lozenges  A few cold & flu powders are also a good idea

Antihistamine  Cream or tablets for insect bites and rashes

Motion sickness pills  If you suffer from travel sickness

Blister kit  (eg Second Skin, Compeed etc)

Elastoplast  A variety of different sizes is useful

Re-hydration sachet  At least 6 - just in case - wise after bad diarrhoea or vomiting

Malaria tablets  Correct advice (e.g. from MASTA) is VITAL

Other Items
Paperback Book  If you all take one, you'll have a library of swaps

Ballpoint Pen  Take two or three for journal and science work

Pencil  1 cut in half to make 2 is good and working eraser (check it works!)

Camera*  Digital or SLR

Film / Spare memory cards  3 rolls a week of film is probably enough unless you expect to take a lot of photographs of, say, animals in Africa. For digital cameras take several small memory cards in case disaster strikes one (or the camera).

Batteries  Batteries run down faster in cold conditions - Lithium last longer

Notebook & logbook  For your journal and field notes - consider hard backed and ring

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Sketch Pad | Could be combined with one of the above.
Paints | If you are keen, take the smallest lightweight set you can
Lightweight Musical Instrument | If you can play it (e.g. harmonica, tin whistle, jew’s harp?!) Maps & Guide books | Keep in a waterproof map cover
Compass | Simple base-plate type. Silva Type 3 as a minimum.
GPS | Expensive but in some circumstances very useful
Whistle | Put it on string
Survival Bag | Orange plastic bag type. Can have other uses.
Wrist watch | Cheap, preferably waterproof with a new battery and Velcro strap Walking poles | Give stability, particularly when carrying heavy weights Hand Lens | Can be useful for science work
Small Binoculars | Wonderful to see wildlife if you’ve got the space and the cash Head Torch | The LED type are brighter and lighter. Take new batteries & bulb.
Head net / Bed net | If you are expecting mosquitoes or bugs

**FURTHER KIT CONSIDERATIONS**
(for items marked * on the lists)

**Rucksack**

Your rucksack must be tough but it is also important that it fits you. Don’t be afraid of being fussy, even if you’re borrowing or being given one. Test it out with weight in it (ask the shop assistants to fill it with climbing rope etc.) before you buy or accept it. Most modern rucksacks have an adjustable back system with an internal frame. These are much better than the old style, external frame, packs. If you are small and/or female it is worth looking at the women’s back systems because they are better for narrower shoulders and short backs. The women’s rucksacks tend to have a smaller capacity (60 litres rather than 70/80 litres) but if you are selective with your kit and pack well you should still be able to fit everything in.

It is important to have a good load carrying belt. If you are slim, make sure the belt is small enough to fit you even if you only wear a T-shirt. Check all the clips and buckles to assess the durability.

Pockets on rucksacks are a personal thing. A large top pocket with a stout zip is a great asset. Side pockets can be good but they also limit what you are able to carry in the side compression straps. You may want a pocket for a water bottle or a slot for a platypus tube.

Consider choosing a pack with bottom access through the lower section for sleeping bag etc. Whatever the manufacturers say, no rucksack is completely waterproof. Don’t be tempted to pack without a waterproof liner.

If your rucksack is going in an aircraft hold make sure that the straps are well taped up to avoid destruction on the conveyor belts (or tape them into a tough outer bag). To guard against this and for general security consider putting it in a large sack or kit bag. For transport on the aeroplane, avoid strapping anything to the outside of your rucksack as you are likely to lose it. If your sleeping matt won’t fit inside, fix it securely in the side compression straps of your rucksack, not underneath or on the lid where it can be torn off. And make sure that any loose straps are well stuck/tied down or they will be ripped off by the conveyor belts. Lots of other people may have the same rucksack as you, so have a large, clear mark so that you can spot it easily in a big stack.

If during your expedition you are travelling by transport all the time consider whether a rucksack...
is actually necessary. A large soft barrel bag might be better and more convenient.

**Tent**
The big question is weight vs durability. An ultra lightweight tent is great for summer backpacking but for winter trips or strenuous expeditions you will need something more rugged. Snow valences (skirts around the tent) are necessary for winter expeditions but are also useful for desert/summer trips so that the tent can be anchored down with boulders but they do reduce ventilation. Darker tents tend to be cooler and can be useful if you are likely to have 24-hour daylight.

Look for a solid construction with minimal fiddly features that can be easily broken, taped seams, strong zips, good ventilation and easy pitching. A big vestibule/porch at either or both ends is extremely useful for storing rucksacks, boots and kit, giving you more space inside. Think about how you will anchor your tent - the tiny pegs supplied by the manufacturers with the tent may not be sufficient for your needs. In Jungles a hammock may be more suitable than a tent [see the article in Geographical magazine May 2007].

**Sleeping Bag**
Sleeping bags are expensive items but it is well worth buying a good-quality one. You may be able to borrow but, as with rucksacks, make sure you get what you need.

The first decision is synthetic or down. Both perform well but the main advantage of synthetic bags over down is that they remain warm even when wet. Down bags, in general are considered to be lighter, warmer for their weight, longer lasting and more compactable. They are also much more expensive, difficult to dry and useless when they get wet. If you choose to have a down bag, you must have a waterproof bag to keep it in such as a waterproof stuff-sack or a Bivvy Bag.

Look at the width, length and shape of the bag. Ask to try it out in the shop (most outlets will have display models for this purpose) to make sure it is not too tight or too baggy. Some manufacturers make special shorter length bags which save small people from having to carry extra weight they don't need and keeps them warmer. Likewise some manufacturers also make longer length bags for taller people.

Other things to look out for are a good hood, shoulder baffle and a strong zip with an internal battle to stop cold air entering. Bags with zips help you to regulate temperature and are easier to get in and out of but some people prefer ‘mummy’ bags without a zip as they are warmer. Check that the zip doesn’t get caught in the fabric of the bag when used.

Often, seemingly similar bags are sold at very different prices. This is normally because they are quilted in different ways. Better bags will have seams in different places inside and outside the bag so that the cold can’t seep in through the seams and the filling doesn't become too compressed in one place. Most outdoor equipment catalogues explain this in greater detail. Compression stuff sacks can reduce the packed volume of your sleeping bag considerably. Check the size of your bag when pressed. Always pack your sleeping bag inside a plastic bag or waterproof liner in your rucksack to keep it dry.

Silk, cotton and fleece sleeping bag liners are available and will increase the warmth of your sleeping bag by about one season but at the cost of increased weight and bulk. Silk is probably best.
**Sleeping Mat**

The important thing with sleeping mats is that they are full-length and insulate you from the ground. Closed cell foam mats are good and come in a variety of thicknesses, colours and prices. Inflatable mats (e.g. Thermarest) are heavier, more expensive and prone to punctures, but they are comfortable and provide better insulation from the ground. If you take inflatable mats, look out for ones with non-slip surfaces so you don't slide off all the time, (one way of doing this is to trail rubber solution glue in a grid pattern over the mat and allow to dry) and make sure you take a puncture repair kit. Like the sleeping bags they must be kept dry at all costs.

**Bivvy Bag**

Bivvy Bags are a great survival piece of kit. They are also useful for protecting your down sleeping bag or for nights that you might want to camp out under the stars without your tent. However, they are generally, heavy, bulky and expensive so consider carefully whether you really need one. Your Bivvy Bag should be waterproof and breathable (e.g. GoreTex, Pertex etc). They can be very expensive items but you are unlikely to need a top of the range one and if you keep your eye out in sales and army surplus stores you might be up to pick one up more cheaply. Alternatively, if you are feeling creative, it is possible to buy suitable material and make your own.

**Boots**

Boots are the most important item on your kit list as any other item of kit you may be able to borrow, but when it comes to boots you should get your own pair. Boots tend to mould themselves to the shape of your foot and for this reason it is a bad idea to borrow a pair, because they will be uncomfortable and alter the shape of your foot to fit the boot!

A good-quality boot will last for many years so it is worth taking time to choose the right ones for you. There are so many different boots on the market that it can become confusing to select a good pair. Here are some basic principles to bear in mind. Your boots need to be:

- a, comfortable to walk in - better slightly too large than too small.
- b, have a good-quality sole (look for the yellow Vibram label)
- c, offer protection high around your ankle
- d, be supple enough for long distance trekking
- e, but stiff enough to take Crampons (if needed)
- f, be breathable if you're going to hot or humid climates and waterproof elsewhere

When you go to buy your boots, wear the thickest socks you will be wearing on the expedition. Once you've bought your boots, wear them in-doors for a while so that if you find them extremely uncomfortable you can try taking them back without them being caked in mud!

**It is very important to wear your boots in prior to the expedition**

By wearing in your boots they will be more comfortable to walk in during the expedition without injuring your feet. When wearing your boots in, it is a good idea to wear them all the time in all weathers for at least a month -- even in school or college. Again: boots for jungles will be different and in deserts they should be light but have a tick thorn-proof sole.

**Waterproof Jacket**

This is your outer shell that will protect you from the weather. It should be big enough to fit your warm clothes underneath but not so big that it swamps you when you only wear your thermals. There is a lot of very flashy and expensive mountain gear on the market so look out for sales. You may not need a top of the range jacket but it does need to be functional.
It should be:
1. windproof and waterproof
2. made of a strong, breathable material,
3. have tough zips with large tabs so you can use them with gloves and storm flaps covering them
4. have stormed cuffs
5. Have a wired hood (which does not cover you eyes).
6. have all internal seams well taped
7. have accessible, useful outside pockets (bear in mind that you may be wearing a rucksack with a waste belt or a climbing harness)
8. be a good length. This is a matter of personal preference but make sure it is long enough not to expose your middle when you raise your arms and short enough not to restrict walking. Generally slightly longer jackets are better. When trying one for size raise your arms, sit down and then bend down forwards.

NB The old-fashioned ventile jackets are often the best for cold dry climates such as the Arctic

**Emergency Ration Pack**

It should weigh no more than 500g but contain enough calories to sustain you in an emergency for 24 hours. You must not eat anything from your pack unless you're in an emergency situation or you're back in civilisation and at the end of the expedition. Some people include food that they don't like so they won't want to eat it but it is more fun to include your favourite sweets, chocolate, nuts and dried fruit so that it is a prize at the end of the expedition. Sachets of high energy sports drink powder are also a good idea. Wrap up your package well in layers of plastic tape so that it stays dry in one piece (and you are less tempted open it). N.B. chocolate melts in hot weather!

**Stove**

When choosing a stove consider carefully what fuel will be available to you. Petrol and Paraffin are available worldwide, completely safe if used properly and burn well but are dirty fuels - so your stove will need extra cleaning and maintenance. Cleaner fuels are less widely available and can be more expensive but treat your stove better. With gas, propane burns hotter than butane and screw fittings should be universal (but in practice they can be different) but availability varies from country to country and gas is useless in very cold temperatures. Multifuel MSRs are a popular choice. Most stoves are field maintainable so make sure you have an adequate repair kit and tool with you (You can often buy these with your stove). In some areas you can manage with wood fires, but check whether these are permitted and try to use only dead wood.

**Tampons / Sanitary Towels**

Some women go on the pill for the duration of an expedition to avoid having a period while out in the field. However, extreme environments and the stress of expeditions on the body tend to mess about with its rhythms, particularly periods. Some women find that they have a period despite being on the pill, while other women experience more frequent or heavier periods than normal. This means that it is a good idea to take an ample supply of tampons and sanitary towels whether or not you are expecting to need them. Pack your supplies in a waterproof bag (zip-lock types are convenient) and remember that you must take all used items away with you, particularly in environmentally sensitive areas, so it is a good idea to take extra plastic bags (again zip-lock bags are convenient and secure).

**Camera**

Digital cameras have many advantages, they can be compact and lightweight and can be...
slipped into an easily accessible pocket for use on the go. Others are large with interchangeable lenses and most of the features of SLR cameras. As it is easy to edit the pictures they are ideal for making prints as well as for Powerpoint lectures or ‘slide shows’. However some may be more likely than film cameras to experience problems in extreme conditions. Rechargeable battery packs tend to last only a matter of hours or days and recharging them is simply impossible on most expeditions. The solution is to take a digital camera that runs off regular (usually AA) batteries so you can take plenty of spares with you. It is worth taking lithium batteries (Energizer Lithium are particularly good) because they last much longer. Remember that in a cold climate batteries run down much quicker. Some people take the largest possible memory cards so that they have plenty of capacity; others prefer to take a lot of smaller ones so that in the event of a disaster not all the photographs are lost.

If you are a keen photographer you may want to take a SLR camera. These are heavier and bulkier than small digital cameras and require more effort to extract from a rucksack when you want to take a picture so think carefully about it. You will also have to take plenty of film (the amounts vary: 3 rolls per week may be adequate but if you are in Africa and photographing animals, for example, you could use far more). Think about what light levels you will encounter to pick the best ASA for the circumstances: light levels are very high on glaciers and low in jungles. Do you want to take slides or prints? Slides are more versatile. Polarising filters really enhance the colours of images. Remember to pack spare batteries (including the watch-type battery that may run your light meter).

Whatever type of camera you take, make sure that you have adequate insurance to cover it in case of damage, loss, theft etc. and carry it in a suitable protective case.

If you encounter low temperatures avoid getting condensation in your camera by leaving it outside the tent or placing it in a zip-lock plastic bag before bringing it inside. The use of silica gel packs may help. In hot climates keep film as cool as possible: one trick is to put it into your sleeping bag in the early morning when it is cool. In deserts dust is the other enemy and a dustproof bag is essential (and take great care when changing films or memory cards). Any electrical camera may fail in extreme conditions so consider having a small back-up non-electrical camera, even a throwaway one, just in case.

Money
Most countries now have an ATM system so that you can draw out local currency once you arrive at the airport but it may be worth having a small amount of cash for use until you find an ATM. Bank websites may tell you where ATMs are in different countries - but not whether they are working! Make sure your cards have the Visa, MasterCard, Cirrus or Maestro symbols, as Switch and Solo cards usually don’t work. It’s a good idea to take two different cards if possible. Before you leave, check you have enough credit in your account and that you inform your bank that you are going abroad so that they don’t refuse your transactions.

In some countries it is necessary to take hard currency - in which case a secure money belt worn under the clothes is essential. Do not keep all your money in one place. Avoid taking travellers cheques, they are increasingly inconvenient to change - and impossible in remote areas. US$ are always a useful backup currency.

Advice for packing
Obviously, it is not a sensible idea to pack your rucksack for the first time the day before you are due to leave on your expedition. Assemble all your personal items together and divide them into three piles …

• essential / must pack items

All the articles which form the Webguide are all written by able and experienced leaders of youth expeditions, but represent their own personal views and not necessarily those of the Council of The Young Explorers’ Trust. The points made represent suggestions for consideration rather than direct advice, and the responsibility for how these suggestions are used rests entirely with the users. No liability is accepted by the authors or by the Young Explorers’ Trust for any loss or damage arising from the contents of these papers.
• probable / should pack
• possible / could pack

...then pack your rucksack. If it all fits, you can lift it and carry it, and it is within the airline weight limit - great. If not re-pack only from essentials and probables. If it still will not fit, pack only the essential. Certain items are bound to change their priority during this process but be ruthless.

After you have packed decide whether you have left enough space for your share of group kit such as tent, food, climbing kit, stove etc. If not, then something has to be sacrificed. Do not be tempted to leave items dangling from the outside of your rucksack you will lose them during transport on the aeroplane or on the way to your expedition area.

Tape down all straps to prevent snagging in airport baggage chutes and remember the airline rules on what may be taken as hand luggage and what must be packed in the hold (Penknives in particular must be packed in your main rucksack for travel otherwise they will be confiscated by airport security).