



venture out

Clothing & equipment

Advice Booklet



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Why are there Compulsory items on the Kit List?

The most common and dangerous problem for students on expedition is bringing the wrong clothing. Either you will bring too much, too little, leave items out or wear items that don't work well enough for changing weather.

Small choices in a shop or at home can have dangerous consequences in bad weather. Whereas careful selection and packing can save money and make your expedition a lot more enjoyable (and safer).

And so, I have written this booklet to help you understand what you need, and what to check for when you are buying or borrowing. I have been buying equipment and clothing for lots of different outdoor sports for 25 years and know it's very confusing and costly. I know that this booklet seems large but there are a lot of photos and useful information - I hope it can help you save time and money when you are preparing for expeditions. I also hope it can make your expedition more enjoyable and safer.

We encourage you to borrow equipment from others to keep costs down. But it is really important to check any equipment you borrow, or buy is good enough to keep you comfortable and safe.

Please remember to also visit our [Youtube channel](#) for more videos.



FIGURE I: ASSESSOR CHECKING KIT AT START OF QUALIFIER

The first thing the trainer or Assessor will do when you arrive on expedition is check your equipment.

COMPULSORY ITEMS MUST BE BROUGHT REGARDLESS OF WHAT WEATHER IS FORECAST FOR YOUR TRAINING AND QUALIFIER EXPEDITIONS.

This because the weather and temperatures are so changeable during a few days outside. And very different between a valley and hill-tops or at night-time.

We have compulsory items on our Expedition Kit List and we are very serious about these as they are there to protect you and everyone else during your expedition. **If you come without these compulsory items, you will not be allowed to go walking with your team.** This is to protect you, the rest of your team, and your trainer. If one of you gets ill or injured whilst out walking, then your whole team, and our staff will have to deal with a problem that should have been avoided when you were buying and packing.

Why do people bring the wrong stuff? – avoid these mistakes!

The main reasons students come with inadequate clothing are:

- You will underestimate the effect that the cold, rain, wind, or sun and warm will have on you whilst being outside *all day* and exercising for a lot of that time. And you will over-estimate your ability to cope with the cold, or wet, or heat for that length of time.
- Your lack of experience of in picking clothing that will keep you comfortable all day and night outside and in a tent. When it can be wet, cold, windy, sunny, all over the space of 2 or 3 days.
- Your lack of experience of how much colder and windier it is on top of a hill or mountain than in the sheltered carpark (400 to 700m below). Hypothermia can set in within 30 minutes if clothing is not good enough.
- Thinking that you will be exercising and hot all the time and so don't need second fleece or over-trousers to keep warm. But you won't walk that fast, and when you stop to check the map or have a rest you get cold very quickly. You need to have extra layers to put on in case someone has an accident and you need to stop and wait for help.
- It is the parents who often decide what to buy but they were not at the Planning day to learn about what we require and why. They may not realise how seriously we need clothing to meet our minimum standards, or they may accept conflicting advice from shop assistants.
- There is so much choice and marketing jargon that it is difficult to know what is better.

When deciding what clothing to bring students base their decisions on previous experiences of walking home from school or around towns or local parks on cold, windy, maybe wet days. But you won't be going home to warm house and dry clothes, and a warm bed. It's too common for someone to stand in a warm shop and imagine an expedition in June being nice weather, then just buy clothing for that kind of experience, and not think of the cold nights or extremes of weather we do get in Summer.

Common statement: 'But this was OK at Bronze/Silver?'

Challengers often think that the clothes they wore for Bronze will still be OK at Silver (or Gold) and not take into account that for the higher Awards they will be walking to higher, more remote areas, where there is no hedges or trees to slow the wind and rain. Or forget that their last expedition might have been at a different time of year, or that the weather and temperatures can be seriously different next time.

“THERE'S NO SUCH THING AS BAD WEATHER, ONLY UNSUITABLE CLOTHING”....

Quote by Alfred Wainwright in his 1973 book *A Coast to Coast Walk*. Possibly the UK's most famous hill walker and author of *Pictorial Guide to the Lakeland Fells Vol 1-7*

Will the weather really be that bad?

Of course, we hope for the best weather, but we must insist you plan for the worst. The weather conditions on expeditions are very changeable, even in Summer, and even between day and night. And remember you are sleeping on the ground outside.

Too often people think “Oh, it’s in May/June, that’s Summer, I don’t need gloves and a beanie” The reality is that we’ve run expeditions with snow at the start of May and cold, wet storms in June/July/August. See examples below:

6:30am breakfast in the rain on 27th April 2019, Bronze training where some had ignored gloves. Storm Hannah meant that the temperature here was just above freezing so their hands were freezing and sticking to metal cooker. The lucky ones had brought gloves and woolly hats to wear. Good job they all had their waterproof over-trousers to keep their legs warmer, drier and less muddy too.



This is Bronze Qualifier 15th June 2019. Team ‘DofE Ninjas’ taking on a storm.



And this is the day after the photo above - Sunny!



This a Silver training 28th June 2019. The clouds were low so the top of the hills were wet, windy and very cold. Teams had to walk for over 3 hours in strong winds and rain. And find their way in fog.



Everyone needed all their layers, hats, gloves, second fleece. And they all still got hypothermia. Some had to go home. The clouds were low so the top of the hills were wet, windy and very cold. That evening at the campsite was dry and pleasant and the next day was lovely!



On the same day, someone in this team had an asthma attack. Here is the team in an emergency shelter, to stay warm and wait for help – have you brought those extra layers and food for emergencies?



This is the same route on the following weekend. One of the hottest days of that year - 28 °C at noon and teams were starting to get heat exhaustion. And definitely needed more than 2 litres of water and sunhats. They had to start walking at 7am to avoid the hot afternoon.



1st May 2016, Silver Qualifier route that we use on the edge of the Peak District (Ashton under Lyme)



Adopt a clothing layering system

The layering system

1. Base layer (wicking layer)
2. Mid layer (thermal layers – can wear one, two or three layers here for extra warmth)
3. Outlayer / waterproof layer / hardshell – waterproof & windproof for extra warmth as well as to keep you dry.



Thinking about your clothing in layers will help you in three ways:

You will have flexible solutions for the weather and temperature changing over the days and nights, on your 2 to 4 day expedition. You can walk in base layers when you feel hot, and then put on extra layers to stay warmer when you get to the top of the hill or at night.

Instead of bring a big heavy insulated ski jacket in warmer months, you can have a lighter waterproof jacket and a fleece. You might only need to walk in a fleece on the hill tops. Or you might just wear a Tshirt under the thin coat on a warm but wet day.

Keeping the weight of your bag down and your temperature just right is really important to stop you getting dehydrated. Dehydration is the most common reason a student gets ill and have to go home (about 3 people get ill and one goes home every expedition) Dehydration is still common on cold wet days because people don't like drinking cold water and don't like to go to the toilet in the outdoors. So being able to adjust your temperature by changing layers is a really important way to reduce your sweating.

Why is cotton clothing not allowed? Not even a Hoodie for the campsite?

Cotton is dangerous because it soaks up water – that's why we use it for towels. It doesn't like to dry out and so stays heavy and cold against the skin and strips heat from your body.

Whereas, a T-shirt or hoodie made from polyester, does not like to soak up water, it will continue to insulate the body even if it is wet and then it will dry out very quickly.

There should be no cotton clothing in your bags – no hoodies/sweat shirts or t-shirts for the campsite or sleeping in. You can get polyester versions of all of these. Every item you have taking up space and weight in your rucksack, must be safe to be wear in an emergency on top of a hill in the rain.



A True Story.....

A few years ago I had to help a team who were having a hypothermia emergency on top of a wet windy hill. A student could no longer walk and were calling for help. Her team were also so cold they were making bad decisions and unable to help her. I asked her if she had any more clothes in her bag that she could put on to keep her warmer. She said 'I have another hoodie but I was hoping to keep it dry for sleeping in' so I told her that 'at this point she was dying slowly from the cold and wasn't going to make it to the campsite'. Her first priority should have been to keep warm but hypothermia was causing her to make bad decisions. So she took out her extra hoodie: it was cotton and damp because she hadn't put it in a waterproof bag that morning. The team has to be helped back to the campsite and failed their expedition.

Why bring a cotton hoodie when it is safer to just bring a polyester fleece hoodie? Everything in your bag should be able to be used in an emergency.

Base Layers

Long sleeve T-shirts - advice

- Made from Polyester or merino wool - never cotton.
- Don't waste money on T-shirts as they are not warm enough at night or in the wind on hill tops.
- Long sleeves protect from sun and insects better than cream.
- Long sleeves can be pushed up during the day but then pulled down in the evenings when the biting flies come out.
- elastane / lycra makes it stretchy and more comfortable to wear next to your skin, especially when you wear things over the top of it
- higher neck lines protect your skin from the rucksack rubbing and sunburn
- antibacterial treatments help stop these getting smelly
- Merino wool really stops them from getting smelly

Walking trousers or walking leggings

- These must be made from polyester – never cotton (and definitely never jeans).
- The pair you are wearing when you come on Day 1 is pair one. And then bring a second pair.
- Trousers can be the most frustrating things to find a pair that fits you comfortably. Remember to consider men's or women's trousers too as they can be a better shape for you.
- Leggings are OK but must be thick sport or walking versions. Thick enough to protect you from nettles, thorns, insect bites and ticks/fleas.
- Lycra/elastane is great as it makes them easier to walk in, especially when going uphill and especially when they get damp and stick to your legs.
- Even if the ones you buy say they are waterproof, you must still bring a separate pair of over-trousers for warmth and extra protection.
- Look for antimicrobial sports pairs for reduced smell.

Can I wear a vest top & shorts?

No - vest tops do not cover your shoulders and so when you carry your rucksack the strap will move and rub against your sunburnt skin. This will be painful on the first day and probably require your parents to come and take you to hospital to have the burn treated.

Shorts can seem like a good idea when you start off in the car park but they don't protect you from, sun, or nettles and thorns. The areas we go for bronze and silver have sheep ticks (fleas that burrow into you). But you can put on your over-trousers for these bits.



This is part of the path on Bronze qualifier – will your bare skin cope with these thorn bushes and nettles?

Socks

- Never light weight as you will have no cushioning and your boots rub holes through these.
- Mid weight thickness for Summer walking, heavy weight for Silver and Gold
- Merino wool helps keep them from getting smelly

Underwear

- Bring sports underwear that is made from polyester which is quick drying.
- Some have antimicrobial treatments that reduce how smelly they get, allowing you to wear them for more days without feeling the need to change them. E.g. Polyester with Microban.
- Merino wool is the best at staying smell free but it a lot more expensive.

Mid layers / thermal layers

2 Fleece tops

Made from polyester - never cotton.

Zip-up hoodies are best as they can be unzipped to let you cool down without having to take your rucksack off.

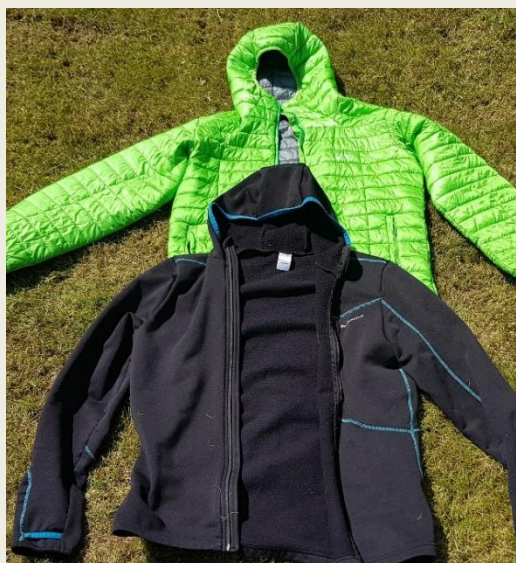
The cheapest ones are too thin and don't have lycra in them. Lycra makes them more comfortable to wear on top of each other and under a coat.

A zip up with hood will keep your neck and head warm when you are asleep.

Insulated (puffer) jackets or waistcoats.

These can be brought instead of the second fleece and can be warmer than a fleece. They are definitely a good investment at Silver if you are going to do Gold. However:

They must be made from a synthetic insulation – not duck or goose feather (down jacket). Down feathers clump together into lumps when they get wet and the jacket loses all its insulation.



Beanie & gloves

Common statement: “But I walk all the time / I’ve walked (somewhere) and didn’t need to wear a beanie or gloves!”

Common response: It’s compulsory to have them in your bag in case you need them. You don’t have to wear them. But if you do not have them at the start of your Qualifier Expedition you will go home. They weight very little and take up very little space – there is no excuse for not packing them for emergencies. If you have not brought them it shows you do not take preparation or safety seriously.

Go back and look at all the photos at the start of this booklet – many of those students said after those expeditions that they never realised that the weather could be that bad or scary, or that they could still cope in it.

Lots of heat is lost from your head. When your head gets cold, your nose will run. You cannot bring enough pocket tissues for this and they don’t work in the rain. Wearing a beanie, even if it’s not that cold will reduce the amount that your nose runs. Beanies and gloves are also a requirement of our insurance regardless of the weather or month. They are so small and light you have no excuse not to pack them.

- Beanies are better if they cover your ears. Even better if they can be pulled down over your eyes to block out the morning light when you are asleep in a tent.
- Beanies with bobbles can be a bit uncomfortable under a jacket hood.
- It doesn’t have to be a thick beanie if you have at least one hooded zip up fleece to layer up your head.
- Gloves don’t have to be very thick or waterproof if you are coming in June/July/Aug. However If you are coming March/April or Sept/Oct you might be better to bring a thick pair or two pairs
- All gloves get wet but we just keep them on as it is still better to have a wet pair on than none.
- A fleece buff can be a lot better for wet weather as it can protect your face from the sting of rain.

Waterproof layers

Is my coat waterproof enough? What are 'taped seams'?

Waterproof can mean many things! Does that mean it keeps you dry for 1 hour or 6 hours? In light rain or heavy rain? And will it be waterproof forever? Too many items in outdoor shops are labelled waterproof when they mean 'slightly waterproof'. You need to check these things below:

Has it got a hood? – any coat without a hood is not waterproof, and is not acceptable. And if it has a hood you will need to keep it up to stay drier. Walking in the rain without a hood will mean the rain will run down your head, in through the neck and soak your upper body within 1 hour.

Are the seams taped?

The seams where the coat is sewn together need to be sealed with tape on the inside to stop water being squeezed in there. There is a lot of pressure from rucksack straps on the back, shoulder and chest, this rubs water in. See the picture below for taped seams. If you cannot see this



tape on your coat then assume it doesn't have tape and bring a different coat. Sometimes you can see the tape from outside the coat through the material. Check yours now!

No ski jackets or puffer style jackets or jackets made by Trespass or Superdry. Padded jackets and ski jackets made by Trespass and Superdry are only designed to be waterproof in snow. Their seams are not taped and so in rain their padding soaks up water making them heavier. They are too heavy and bulky to bring in summer when it could be warm but wet. You need a thin waterproof that takes up less room in your bag when you are not wearing it. Remember if you cannot see tape on your seams like in this picture then you cannot trust it and should not bring it.

Waterproof jacket advice

- The main zip should be waterproof or have a flap over the zip to stop the rain coming through the zip and soaking your chest.
- Your coat must be loose enough to fit on over 2 layers of fleece tops.
- Can the pockets be zipped up? –When it rains the water runs down the coat into the pocket and onto your body. Pockets need to have zips to keep them closed when it is raining.
- How thick is the material? – Waterproof coats feel like plastic, and the thicker that plastic is the longer it will keep you dry and the longer the coat will last.
- How old is the coat? – All waterproof coats fail eventually, either because the material is thin or it has been rubbed a lot and aged. The coat you used at Bronze may not be waterproof anymore for Silver.
- Longer coats are more waterproof because water comes soaks upwards from the legs into your lower back and stomach area.
- 'Breathable' means that the fabric can let water vapour (from sweat) out so that your clothes dry out. There are some very expensive types of breathable fabric (Gore Tex is the most famous) which some manufacturers make some coats out of. Their cheaper coats are made from cheaper breathable fabrics. Even the best of these fabrics don't 'breathe' when it is raining and the outer

surface is wet. It is better to buy a coat with cheaper breathable fabric and extra features like zips in the arm pits that are better at letting out sweat when you open the zip. Breathable fabrics let your clothes dry out after the rain has stopped and you continue to wear the jacket (or over trousers) for warmth.

- Waterproof coats and over-trousers are damaged by normal washing powders (biological and non-biological). They must be washed in special detergents. And then reproofed with another liquid (see our shopping list).

What are over-trousers?

These are waterproof trousers that are worn over the top of another pair of trousers or leggings. They are made from the same material as waterproof coats and so should feel like a plastic fabric. And they have taped seams. **This is a second layer to make your legs warmer too.**

You cannot come with just one pair of trousers or leggings and say “but these are waterproof too”. Even if you think your first layer walking trousers are waterproof, they won’t be waterproof enough, for long enough – and so you must also have the second pair of OVER-trouser. They are vital for extra warmth. They are again demanded by our insurance company. And so if you do not have them you will not go walking. Even if no rain is forecast.

Over-trousers can be taken off before you get into a tent. This allows you to sleep in your leggings and to keep your tent and sleeping bag cleaner and dryer

Here is a team walking through the long wet grass on the campsite in their waterproof over-trousers and waterproof boots. They kept these on all day and evening to keep their legs warmer, dryer and cleaner.



Over-trousers advice

- They need to be loose to allow you to put them over damp trousers and still lift your knees for going uphill.
- Bronze/Silver: ankle zips to make them easier to put on when wearing boots.
- Silver/Gold: Get a pair that can be zipped all the way up to allow you to put them on without having to take your boots off. you will want to get a pair that is thicker – thin ones let in water after a couple of hours. Full length zips allow you to open the zip a bit to let sweat out in between rain showers.
- It is common for students grow out of their over-trousers by Silver. Short trousers will make the rain run down them and into the ankle of your boots. If they are tight on your legs it will make it more tiring walking in them, especially uphill. Be sure to put them on over your trousers and walk upstairs in your house to check you can lift your knees. The next size up often has more room in the thigh and waist but very little extra length on the leg.

Am I 'waterproof'?

Bronze teams starting in the rain on the morning of their Training Expedition.

If it is wet on the day of your expedition (check the forecast for the expedition area). Then please come already waterproofed. We should not have to help you get things into waterproof bags before we can set off walking. So that means:



- Coat AND over-trousers already on.
- All fabric items in your bag inside waterproof bags – either thick plastic rubble sacks or in drybags. This includes your sleeping bag. **RUCKSACKS ARE NOT WATERPROOF!**
- The only thing allowed on the outside of your rucksack is a sleeping mat. It too must be inside a plastic bag to keep it dry.

How to pack for hot, sunny weather

It is common for our expeditions in Summer to also be on some of the hottest and sunniest days of the year. Or one day can be wet and the next sunny. These sunny days can be more challenging than a cold days – for most of the students, the heat and the sun cause dehydration, headaches, sickness, sun burn, and dehydration.

This is when you will also need to bring sunscreen, sunglasses and a sun hat and neck scarf.



Colour of clothing and headwear – remember that black and dark colours absorb sunlight and heat you up. So wearing light colours on your body and head will reflect more of the heat.

- Sun hats are best if they have at least a peak on the cap.
- A buff / neck warmer can be thin for good weather forecast to protect your neck in the sun or act as a filter for dust and pollen

Sunglasses (not compulsory)

- These should be sport wrap arounds to cover more of your eye area because you cannot rub sun cream here. Wrap around will keep more wind, dust and pollen out.
- Even in dull weather I wear these to protect my eyes from the wind on hill tops.
- I prefer the sunglasses that start light in dull weather and get darker if it is sunny. (Photochromatic class 0-2 or class 1-3)

Why do I have to wear boots and not a shoe – and what's the difference?

Simple - a walking boot has a cuff that covers the ankle. And a walking shoe has no ankle cuff.

Sometimes students come wearing a shoe and say that it was labelled as a boot in the shop or a shop assistant said 'it's a boot' or 'a shoe should be OK for Bronze'. Shop assistants cannot decide what is appropriate footwear for the route you will be walking on with a heavy rucksack. It is not their decision.

If you do not come wearing boots we will not allow you to walk with your team incase you have an injury that could have been reduced had you come with the kit we listed as compulsory.

Boots reduce the damage to your ankle when you go over on it – and you will go over on it! I've walked almost a thousand mountains and I go over on my ankle regularly due to tiredness or looking around or just the uneven surfaces. The ankle support stops the twist becoming an injury. I like to run in the hills with shoes, but **I always wear boots with heavy bags**. It is what my insurance company expect and it is what we insist on.



Boots advice

- Fabric boots are better for beginners – lighter, more flexible and so less tiring , less sweaty and unlikely to blister your feet. They will feel more familiar to walk in.
- Your boots must be waterproof. Wet skin is more likely to blister quickly.
- Shoes are not accepted (no argument) as they do not provide ankle support when carrying heavy bags, long distances over rough ground. If you come in shoes you will have to go home.
- Leather boots stay waterproof for more days (years) than fabric boots, but they have stiffer soles and can feel odd to walk in for beginners and occasional walkers. They are also heavier. A small extra weight on your feet can make you a lot more tired after 30,000 steps each day.
- Only bring leather boots if you have already walked in them a lot. Leather boots need to be 'broken in' This means walking in them to make the leather softer and crease and bend. Boots also break you in – they rub your skin and make your skin thicken and harden at the pressure points. But you have to wear them recently and regularly as this happens slowly over weeks.
- Leather is a good investment if you will be doing a lot of walking with your family. It is not a good investment Bronze as you will grow out of them by Silver.

Keeping your boots waterproof: boots must be cleaned with a special detergent and stiff brush. Then a separate boot reproofing liquid is applied. Leather boots need a different reproofing than fabric boots. This should be done after each expedition otherwise the boots will not be as waterproof the next time you wear them. Be sure to buy some of this when you get your boots.

Why do boots have to be waterproof?

Wet feet are more likely to blister and walking through wet grass on the campsite would get your feet wet if you were wearing shoes. Here's what you will be walking through (on Bronze):



65-70 Litre rucksack!!

There are 2 different measurements for a rucksack:

The size of the back fitting – this is about how tall you are. Most DofE bags have an adjustable back system that allows you to change it to meet your back length. Other more expensive bags have fixed back systems (these are lighter) and are listed as small/med/large or size 1 to 3. Your trainer will show you how to adjust the rucksack before you go walking to make it fit you.

The volume of the actual bag – this refers to how much you want to put in it. The volume is always listed on the label and on the outside of the bag. The one below says 65 on it, this means that it can hold at least 65 litres. If you can't see 65+ on the outside or on the description of the rucksack (look online) then be it probably isn't.



Photo: Shows adjustable back system and hose from drinking bladder

Why do we need such a large rucksack? (I'm small and it looks massive on me)

- Larger bags are so much easier to pack and find things in. Small bags are slow to pack and you can struggle to pack things in.
- A large bag can be made smaller by pulling on straps to squeeze it smaller. But if you come with a small bag it cannot be made bigger for you to fit team kit in.
- Your sleeping bag takes up 1/3 of the volume. It must go in the bottom of your bag to stay dry.
- Nothing is allowed to be attached to the outside of your bag – other than a sleeping mat. Things fall off and are lost.
- when you get to the expedition start point you will be given some group kit to carry (cooker, gas can, tent, tent poles, emergency shelter) This is not someone else's job you will all have to take something. So, if it is full when you leave your house then it's probably not big enough or you have too much stuff.



Buying Advice

Compare the weight of the empty rucksacks you are considering buying. Some Brands are much heavier for the same internal volume. Getting a bag that is 300-500g lighter than another bag, and keeping down the weight of things inside it will make you a lot more comfortable.

Only bring a proper hiking rucksack – not a traveller bag with shoulder straps. These are very uncomfortable for extended walking and the waistbands are terrible.

Check the waist band can be tightened enough without the buckles meeting. Do this before you take tags off. If you cannot get it tight on our waist it is bad for you and you need to find another bag.

What type of sleeping bag?

Your sleeping bag needs to be 3 season bags (comfortable down to 2-5 degrees) As even on a warm day the temperatures at night fall to around the temperature in a fridge 4-6 degrees and the ground you are lying on sucks in your body heat). If the temperatures are warmer on the night, you can unzip the bag to cool down. Please note that women feel the cold more than males and smaller people and people with low body fat lose heat more quickly than larger adults. Women's sleeping bags are sold that are shorter and thicker.

Weight: keeping the overall weight of your rucksack down is important and sleeping bags are the biggest weight you will carry. So saving weight here is important. (see note later in booklet about weight saving)

It is also not worth bringing a warmer bag than this as they will be a lot bigger and heavier and take up too much space in your bag. If it is early or late in the year and you are concerned about being cold then remember that you can sleep in both your fleeces with your beanie hat on.

Sleeping bags with synthetic insulation are heavier and bulkier but a lot cheaper than duck down. They are also easier to clean and continue to work even if they get wet in your bag. Down sleeping bags are very expensive and only worth buying if you know you will always be using it for 20 years and be able to keep it dry.

If you already have a thinner, 2 Season sleeping bag then you can buy a sleeping bag liner made of fleece to make it warmer by 1 season. This must be fleece and not silk (or cotton).

Sleeping bag liners made of silk are good for keeping your bag clean when you sleep in them in your clothes. Sleeping bags are often too large to go in a washing machine at home.

Old sleeping bags: the synthetic insulation inside sleeping bags breaks down over years from being continually crushed. This means they get less warm as years go on – but still weight the same. If you can afford, it buy a good bag now and hopefully get a lot of use out of it in the next 10 years. You'll find it a lot smaller and warmer than an old, heavy one.

Sleeping mats

Foam mats are fine as long as they are at least 10mm thick and foil coated. Anything thinner and you will feel rocks through it and it will be colder). Foam mats are bulky and don't fit into rucksacks.

If you are sure you will be doing Silver and Gold stretch to an air mattress as they are warmer, more comfortable. They are also smaller, and lighter and fit in your bag. Not having them on the outside of your bag means they do not get wet, and you are less likely to be blown about in the wind (like a big sail).

Air mattresses can be bought as $\frac{3}{4}$ length and this make them even smaller and lighter.



Making things smaller (to fit in your bag)

All sleeping bags should have a compression bag – a bag with straps on the outside that allow the compression of the sleeping bag to make it smaller to pack in the rucksack. If your sleeping bag doesn't have a compression sack when you buy it then it's maybe not a good enough standard to begin with so look for one that does have. Otherwise, you can buy a separate compression bag. See our shopping list.

Compression bags are not just for your sleeping bag. You can put your clothes in one and squeeze them. But remember to put them in a dry bag as well.. If you want to be really fancy, (and have even more money) you can find drybags that are also compression sacks – I've invested in these as I do a lot of wild camping or travelling overseas.)



How to waterproof your equipment

Rucksacks are not waterproof, even with the rain cover on. And rain gets in when you open them to get food or clothing out. You need to put everything inside extra waterproof bags. This keeps them dry when you open you bag in the rain. It keeps your bag organised for packing it and keeps your stuff together and tidy in the tent.

Either use:

Rubble sacks (not bin bags – they are too thin. Rubble sacks can be found in Tesco next to bin bags)

Or Dry bags. (Search Amazon for Dry bags or find something like this in GoOutdoors)



Small, overlooked items that cause big problems on expedition

You will need to drink 2 litres of water per day, whether it is hot or cold, otherwise you are dehydrating. Dehydration is difficult to spot in yourself, by the time you feel thirsty you are already very dehydrated. Dehydration can be mild and still have considerable effects on how you feel and perform:



- It makes you weaker when walking.
- It makes you less hungry and puts you off your food (making you weaker)
- You make bad decisions and your mood gets low or frustrated.
- You don't eat or drink properly in the evening
- You then don't sleep well or recover properly during the night
- You wake up either in the middle of the night or in the morning with a sore head and feeling sick.

Two easy ways to avoid this happening to you:

Bring either a 2 litre bottle or 2x 1L bottles. Don't bring a smaller bottle hoping to find somewhere to fill up along the way. There are no toilets to stop at and we don't drink water from streams near farms.

Bring clear bottles, not metal bottles. This will let you see how much you have drunk already. Then you can check at your 3 break stops how much you have drunk. E.g. 1 quarter by morning break. Half by lunch time..... Make it someone's job in the team to be the water monitor who reminds everyone and checks that their teammates aren't getting ill unnoticed.

A head torch – not a hand-held torch.

Again, everyone must have one each so that you can all walk or work in the dark.



It must be a head torch, not a hand torch so that you can then use both hands to do things in the dark.

Some students think these are only for walking to the toilet on the campsite. However, on expeditions in Sept or later it gets dark early and it's not uncommon for teams to get to the campsite late or even have to walk in the dark. They need a head torch and both hands to then put up tents and cook.



Wristwatch – for navigation!



Teams often get lost because they forget to work out how long they should walk until their next turning point or change of direction. Or they forget to time how long they have been walking for.

However, if they have a watch they can at least see if they have walked too long and decide if they need to turn back or go on to find the turn.

Every person in your must have a watch so that you can all take your turn at navigating. If you do not bring one it means 2 things. You are not prepared to be as strong as the others in your team: and you expect others to do things for you.

Wrist watch advice

- This is for navigation. It cannot be your phone.
- Waterproof
- Alarm function to wake you in the morning
- Soft silicon wrist band allows it to be put on top of your coat wrist or onto your rucksack strap.
- Some students choose to bring an activity tracker watch - that's fine, as long as it tells the time and doesn't need charging every day.
- It cannot be your phone. It will run out and cannot be used reliably in the rain.
- If you do not like wearing it on your wrist, or if it is raining, you can put it on your rucksack strap.

Trekking poles

Walking poles are not compulsory but If you have problems with your back, knees or ankles then we strongly advise you buy a pair (you need 2 – only one is a waste of money)

If used properly they spread 30% of the work and strain from your legs onto your arms and shoulders.

The cheapest are a blue pair from Decathlon that cost £4 each.



First Aid kit & medication



On the Planning Day participants are shown a personal first aid kit to buy (see kit list & the Shopping List). Please make sure you bring one this small and not a bulkier one for cars or homes.

A common mistake is that participants use the blister plasters on one expedition then forget to buy more to top up their kit before they come on the next expedition.

Participants are also told to bring medications: sun cream, antihistamine tablets and cream (bites and stings), painkiller. And any other medications they take.

Asthma – if you come without your reliever inhaler you will not be allowed to start walking.

Please note that our booking form asks for medical details to be declared, and states that if you have asthma you need to see your GP/Asthma nurse to have a recent check up and discuss your medication. This is because every year we had students have asthma attacks whilst on expedition. These students often have not had an attack for a long time but they will also not have been walking as far and uphill with such a heavy bag Or have slept in a tent where the air can be cold and damp. Remember that, on your expedition you will be walking on remote paths that an ambulance cannot get to if you were to have an attack.



Hayfever and other allergies

If you need an epipen you must bring 2 or you will not be able to participate.

If you suffer from hayfever, it will be a lot worse when on expedition due to the amount of trees and fields around and the wind blowing it into their eyes. Please sure you come with antihistamine nasal spray and a pair of wrap around sunglasses (light tint) to keep the pollen out of your eyes.



Midge repellent and bite cream

Midges are tiny flies that come in swarms and they bite and leave itchy marks. Every campsite has them and they come out at dinner time and spend hours biting you. Wear long sleeves and bring smidge cream to repel them and bite soothing cream. Keep your tent zipped up to stop them coming in.



[Smidge website](#)



How to look after your clothing & equipment

Waterproof coats and over-trousers are damaged by normal washing powders (biological and non-biological). They must be washed in special detergents. And then reproofed with another liquid (see our shopping list).

They must then be 'reproofed' with a different treatment that restores their ability to repel water. This is like a fabric conditioner. There are spray-on versions but the best way is to buy the version where you steep the coat and trousers in a bucket/basin/sink for 30 minutes with the liquid. Then allow to dry.

Waterproof boots – must also be cleaned with a special detergent and stiff brush. Then a separate boot reproofing liquid is applied. Leather boots need a different reproofing liquid than fabric boots. This should be done after each expedition otherwise the boots will not be as waterproof the next time you wear them.

Sleeping bags – you sweat out litres of water over-night and this moisture builds up in your bag over days. When you get home hang your bag up for a couple of days to let it dry out. If you do not, mould grows in the bag and it develops a 'musty' smell.

How to keep the weight of your rucksack lower

How to weigh your rucksack:

- Use your bathroom scales and set them to Kilos.
- Weigh yourself (clothes on and your normal, light shoes/trainers).
- Then weigh your rucksack, fully packed with all your food and 2 litres of water.
- The weight of your bag needs to be no more than 1/3 of your body weight, minus 1Kg.
- This extra kilo will be taken up by the team kit that you will be carrying (part of the tent, the cooker or gas or emergency bag)

This would mean that whilst you are walking you are carrying 1/3 of your body weight around and uphill. This may not feel very heavy when you pick it up in your home, and you might then think 'Oh I'll be alright, I'll take this extra.....' But if you carry this amount around for over 6 hours every day you will quickly realise that it is tiring and you are sore. You will wish you had been more careful about the amount of things you packed or the weight of every single thing in your bag. Experienced hill walkers never carry 1/3 of their body weight when they go camping. They keep the weight of their rucksacks below 1/4 of their body weight. This is difficult to do as it can mean buying expensive, light weight equipment. And it is also more difficult the smaller you are – a bag for Gold isn't much heavier than a bag for Bronze but the participants are definitely smaller at Bronze. But you can get close to 1/4 BW by being careful about what you bring and how much you bring.

Challenge – try and get the weight of your bag down to 1/4 of your body weight - 1Kg

'Every little counts' – to get the weight of your bag down by 1Kg would be great! 1Kg is actually 50x 20g so look for lots of little extras here and there to strip out. Here's the main places to look:

Rucksack choice: Your rucksack needs to have a volume of at least 65L but different Brands and models will have the same volume yet weigh considerably more when empty. This is the easiest place to save 300-500g. Get a light rucksack that is also 65L

Sleeping bag: Sleeping bags are big and heavy, especially the cheapest ones. They use cheaper, heavier insulation padding inside and heavier fabrics. Make sure you bring a 3 season (2-5°C) bag but ways to bring lighter bags are:

Some Brands make them in different lengths or do women versions which are shorter (and so lighter)

Old sleeping bags (15 years old) are not as warm as they used to be but can be very big and heavy.

Clothing:

Bring only one change of clothes, regardless of if you are on Bronze, Silver or Gold.

Don't bring pyjamas or 'night wear'. At night just change into your 'change of clothes' if you want something clean, fresh, dry to sleep in. Then put your day clothes on in the morning, even if they are a bit damp or dirty.

Don't bring extra trainers or shoes for campsite – the campsites are fields of long grass and can be as wet and muddy as the rest of your walk, so your dry socks will get wet on the walk to the toilet in trainers.

Toiletries / wash kit:

Although there are showers on many campsites, you will find that in the evenings, you are too busy or it is too cold or dark for you to want to go for a shower. You will definitely not want to get your hair wet then sleep in a tent. So you will not need shampoo / conditioner / bodywash / towel.

For toothpaste / moisturiser / hand gel etc. bring the tiny, travel-sized versions you can buy in supermarkets.

Small soap bar from hotels are lighter and have more soap than the liquid soap. Keep it in a food bag.

Deodorant: definitely bring this but use sticks or roll on, not aerosol (not even travel one). They take up more space and aerosol versions are dangerous if someone in your team has asthma.

Share some creams between 2 or 3 of you e.g. sun cream, midge repellent.

Food and snacks:

Bringing too much carbohydrate is common (pasta or rice). Weigh how much you need for each evening and then only bring that much.

Too much packaging. Plastic pots are unnecessary weight – you have a mug. Bring sachets of porridge and use your mug. Or strip off all extra packaging and maybe put things together in bigger zipper bags.

Smaller things:

Electronics – don't bring power packs (and leads) for your phones – you shouldn't have your phone on as it is only for emergency use.

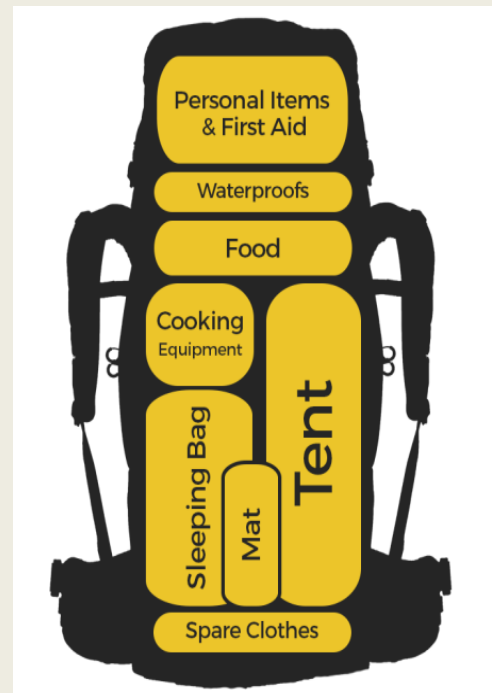
Cut off the labels from all your clothes, sleeping bag and equipment (approx. 100-150g)

How to pack your Rucksack to make it more comfortable and better organised

If your rucksack isn't packed properly, it will be more uncomfortable to wear and it will be harder to find the things you want, when you want them, without pulling everything out in the rain. You will be more tired and can even be injured. Spending some time making sure that you've packed your bag properly will make your trip even more enjoyable.

Packing Your Rucksack

The diagram shows how to pack a rucksack for an expedition. Packing your bag correctly is all about weight distribution and ensuring that you have easy access to the items you'll need during the day and in an emergency. Packing too much heavy equipment towards the front of your bag will pull you backwards as you walk, making activities like trekking up hills more difficult, and if you have too much weight on the left or right, you'll be pulled to one side.



How To Pack Your Kit

- Your heaviest/biggest item should go closest to your back to stop your bag feeling like it is pulling you backwards. And lowest down in your bag (to make you sway less)
- Your heaviest & biggest items should also go in first – for most of you this will be your sleeping bag and tent. Or 2L water bladder. Put your tent in your bag vertically, against the part of the bag that will be against your back. This will keep the weight of the tent close to your body, making it easier to carry.
- Put your sleeping bag in the sleeping bag compartment at the bottom of your bag (if it has one). Or beside your tent to balance the weight. Your sleeping bag should always be inside another waterproof bag.
- Bulkier items should go in the middle of the rucksack, such as cooking equipment.
- keep your dry change of clothes in the middle in a waterproof bag. You may need to access this if you get really cold.
- Balance the weight of the side pockets with liquids: keeping them upright will prevent them from leaking. This can include water bottles and liquid fuel.
- Put your food at the top of the rucksack, with what you're going to eat next at the very top. This prevents you having to search through your bag for food and stops the food getting squashed.
- Put your waterproofs in last, so that you can get to them quickly if it starts to rain.
- Finally, fill the space in the lid of your bag with all the things you might need during the day – your first aid kit, snacks, sun-cream and head torch.
- Once you've packed your bag, check for loose spaces that you haven't filled.

Tip Check that you've packed your bag properly by putting it down on the floor. If the bag falls to the left or right, then the weight isn't evenly distributed on each side and the load will need adjusting. If the bag falls onto its front, with the straps up in the air, you have too much weight towards the front of your bag, which will mean that the load pulls you back as you walk.

Why do we not allow equipment to be attached to the outside of rucksacks?

This is how many things are lost or damaged. They may be tightly attached when you start walking but this doesn't last:

1. You take 30,000 steps with the bag swaying around. That really loosens things!
2. You set the bag down a lot to take things out. This loosens things. Things often get left behind after a break.
3. You will be squeezing past thorn bushes that tear everything, especially any plastic bags you might have on the outside. So a sleeping bag would not stay waterproof.
4. Water bottles attached with a climbing clip will swing thousands of times and eventually the clip or the plastic part of the bottle breaks.

Question: How can I be better organised inside my rucksack and inside my tent?

Answer: lots of smaller waterproof bags, different colours and write on them.

