

Participant Outcomes | Camp Craft, Equipment & Hygiene (*Part One*) - Choosing suitable clothing, footwear & emergency equipment and knowing how to use it all



The careful selection of equipment is not only important for **safety** & well-being, but vital to the **comfort & enjoyment** of any expedition. This doesn't mean buying the most expensive equipment or clothing, but seeking suitable advice & making the right choices for the environment that you will be backpacking in. The Award in Bermuda has a selection of stoves & rucksacks which may be borrowed. It's a good idea to take advantage of this, as it gives you the opportunity to test & gain experience using a variety of equipment so that you can make informed choices when purchasing your own. **The Award is concerned with extending the range of personal interests & it is hoped that your Qualifying Expedition will lead to many more outdoor expeditions - rather than be your last!**

All Participants should make their own checklists prepare for their first Practice Journey and have waterproof outer-layer and personal & emergency



of equipment when they start to their own clothing, equipment.

This Session is all about dressing comfortably for the various conditions in the outdoors - plus ideas to help you get it all packed! **There is no perfect system.** You will need to develop a system that works for you! We can only provide you with some ideas & 'tricks-of-the-trade', but in the end, **YOU** need to figure it out for yourself through trial & error.

CLOTHING

To understand the 'whys' of outdoor clothing, you first need to understand the purposes. **When you are outdoors, you have no control over the weather or the temperature.** You can't turn up the heat when it gets cold and you can't turn off the wind, either! Clothes, therefore, need to keep you warm when it's cold, cool you off when it's hot, block the wind, keep you dry in the rain & protect you from the sun.



**WHO NEEDS
GORE-TEX®**

A simple
light weight
WINDSHIRT
is often superior
for hiking in the rain!

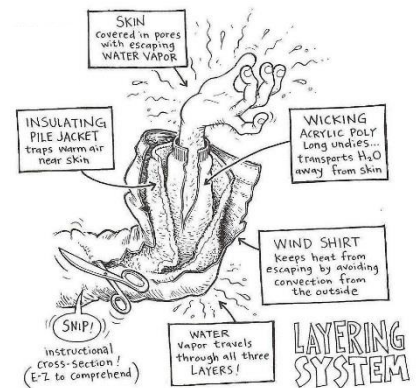
*If you were to look into the closet of an experienced backpacker, you'd notice all clothing would be organized around the all-important concept of **layering** - the ability to modify your apparel to suit weather and activity.*

Layer 1: Outer Layer

The Outer Layer is your first line of defence against the elements, so it should repel rain & snow, but also breathe so perspiration doesn't build up inside your layering system & soak you from within. In wet conditions, you'll want something that's totally waterproof, with features like sealed seams, zipper guards & cinchable hoods. **Armpit zips, mesh pockets & waist draw cords will help you ventilate when working up a sweat.** In drier conditions, you can get away with a shell that's windproof. These usually aren't very waterproof but are fairly breathable & they pack smaller & lighter than waterproof models.

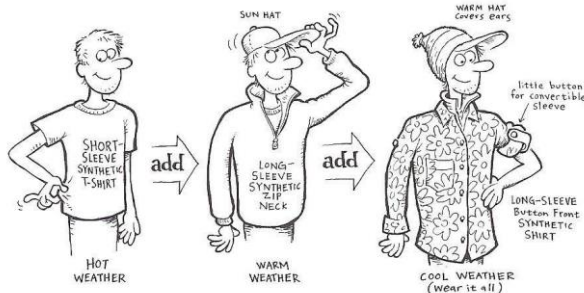
Layer 2: Middle Layer

The shells mentioned above will keep you dry & prevent wind from penetrating, but **staying warm** is the second half of the battle. This is where the all-important insulating layer comes in. Your choices range from synthetic fleeces of various weights & thicknesses, to plain old wool or down, to synthetics like *Polar-guard*, *Micro-loft* & *Primaloft*, to name a few.



Synthetic fleeces are the most effective all-around materials for insulation & your best choice for wet weather. The advantages of these materials are **breathability & ventilation**. They keep you **warm even when wet & trap heat while absorbing very little water**.

For below-freezing weather, add a light **down jacket** to your wardrobe. Lightweight & highly compressible, down won't add much to the bulk or weight of your pack, yet it will help you keep warm during rest stops & around camp.



Once you choose the materials, **style is the next consideration**. **Jackets & pullovers** offer the ultimate in warmth. **Vests** warm your core when the weather's chilly but not downright cold, while allowing your arms plenty of freedom of movement. And don't forget the **pants**! On cold-weather outings & most any travel high in the mountains, warm pile pants are wonderful to slip into once you reach camp & begin to cool down after all that hiking.



MOSQUITOES | A Special Mention

In most places where you'll be backpacking, protecting yourself from insects such as mosquitoes, no-see-ums & black flies can make the difference between having an enjoyable expedition or crying yourself to sleep out of sheer frustration! Having a head net in your rucksack is a great first line of protection & don't forget your 'bug spray' either!

DON'T FORGET!!
Get the highest percentage
of DEET as possible!



Layer 3: Inner Layer

In the wilderness, you need a **base layer** made of high-performance fabric that will **wick moisture away from your skin**, so you stay dry & comfortable --- especially important when you're working up a sweat! Several weights of fabric are available, however, for general 3-season backpacking; the **lightest weight is your best choice**. For winter camping, add a heavier-weight top & bottom to your clothing bag. There are many fabrics of varying thicknesses & all sorts of styles to choose from, but it's important to remember one thing: **NO COTTON**.



SOME IMPORTANT LAYERS!!

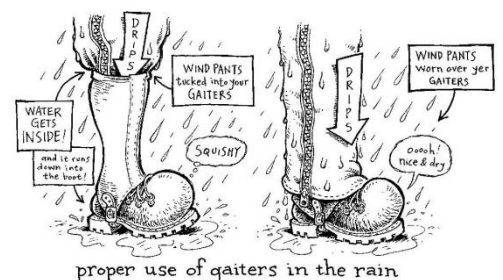
SOCKS perform 3 functions: they **cushion** the feet, **absorb** perspiration & provide **insulation** against the cold. A mixture of wool & synthetic fibres is recommended & they should be free from holes! Frequent washing is necessary for them to function properly & at least 3 spare pairs should be carried.

*Wearing 2 pairs of socks in hot
will probably soften the feet
& increase the risk of blisters.*

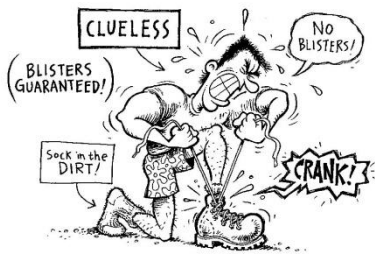


weather

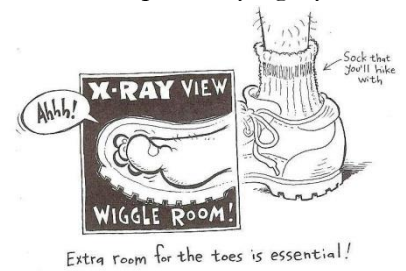
FOOTWEAR may be one of the most important parts of your kit! When you are backpacking, you quickly realise how important your feet are; so finding a **comfortable** pair of shoes/boots to hike in is an important part of planning your trip. Typically, the longer your trip is, the heavier your rucksack will be, so your footwear will need to reflect the **foot & ankle support** you'll need. A good rule to follow is to get the lightest shoes/boots possible, while still taking into consideration the terrain of where you'll be backpacking **AND** your body's need for support.



For instance, if you 'roll' over on your ankles a lot - you should look for a mid- to high-top shoe/boot. If ankle strength isn't an issue but your trip will be in a very wet environment, look for a shoe/boot made from a quick-drying nylon & mesh & buy some 'gaiters' to keep your feet as dry as possible.



When trying on hiking shoes/boots, always wear the socks that you are going to hike in. Shopping later in the afternoon when your feet are swollen will mimic your 'feet conditions' while on the trails!



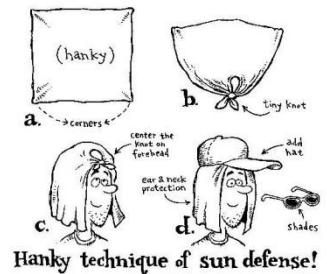
...and while you are on the trail, don't follow this guy's poor example!

BACKPACKING AND THE SUN



We all know that a large portion of the body's heat is lost through the head, so wearing some form of head protection is essential to staying warm. **But hiking in heat & strong sun, a light, wide-brimmed hat provides protection, not only for the head, but for the face & neck as well!**

Although baseball caps provide good eye shade & head cover, they leave the neck & ears unprotected! Give this technique a try!



PERSONAL EMERGENCY EQUIPMENT



In addition to the clothing listed above, there are a small number of items of emergency equipment which should **always be carried by each member of an Award Group**, known as **The 10 Essentials**. Personal emergency equipment should be kept to the bare minimum or the exercise in safety will become self-defeating with extra weight leading to fatigue and a loss of mobility.

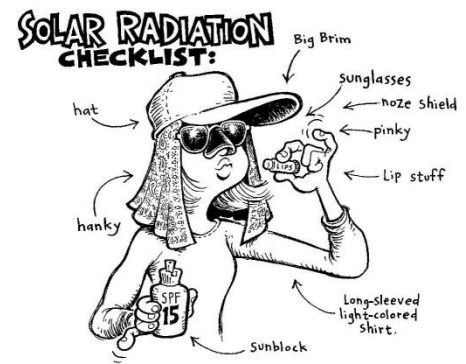
- ❶ **Torch/Flash Light** | Each member of the Group must carry a flash light, together with a spare bulb & **NEW** batteries. A head lamp is a useful addition to any equipment list as it leaves your hands free. *Remember that it is impossible to read the map if you can't see it!*
- ❷ **Emergency Rations** | Chocolate, granola bars, 'mountain mix' or **GORP** (Good Old Raisins & Peanuts) are effective & easily obtained. These should not be consumed under normal circumstances but kept for an emergency.
- ❸ **Whistle** | A plastic whistle must be carried by each Group Member.*
- ❹ **First Aid Kit** | A Personal First Aid Kit must be carried by each Group Member. *
- ❺ **Map & Compass** | Each Group Member should have the appropriate map(s) of the area & a **personal compass**.
- ❻ **Repair Kit & Pocket Knife** | A small simple high-quality pocket knife, which will retain a sharp edge, is better than a poor-quality knife with a dozen different gadgets. A tin opener & a spike are the most useful additions to the blade. Your Repair Kit should include duct tape, a needle and thread and anything else that you think could be of use if your tent leaks, rucksack strap snaps or your glasses break.
- ❼ **Matches** | In addition to one or more boxes of safety matches carried in the driest place you can find, spare emergency matches and a strip to strike them on, should always be carried.



⑧ **Insulation** (*extra clothing*) | Keeping a few extra layers in your rucksack will prove a worthy bit of extra weight if the temperature plummets or your clothes get wet. Remember, pack everything as water-proof as possible! Ziploc bags are a backpacker's best-friend!

⑨ **Water** | At least one strong plastic container with a 2 litre capacity is usually suitable. You will be provided with water purification tablets in case you need to use questionable running water.

⑩ **Sun Protection** | This shouldn't confuse anyone!!



Pencil & Notebook | Required by each Group Member. Pencils are more reliable than pens in wet or adverse conditions.

Route Cards/Emergency Contact Details | Required by each Group Member.

* Please read *Wilderness First Aid & Emergency Procedures Handout* for more details.

To learn more about **The 10 Essentials**, visit **REI** at <http://www.rei.com/expertadvice/articles/ten+essentials.html>.

Participant Outcomes | ① Choosing & caring for camping gear, ② Packing a rucksack, waterproofing your contents & always keeping the weight down to a minimum



Each member of the Group must be **self-reliant** & able to survive **independently** of the rest of the Group. Each individual must carry the equipment listed above, as it will go a long way to ensure **personal safety** in the **worst conditions** likely to be encountered. The desire to carry additional items should be resisted. When Group Members have all emergency equipment items, it provides a **reservoir of equipment** which will overcome the loss or malfunction of individual items. While spare clothing, whistle, emergency rations & the torch are a must for each individual, a team should never be accused of being inadequately equipped if every member is not in possession of a map, a compass, pocket knife, pencil & notebook or spare batteries & bulb.

It is essential that a Group carries at least two maps & compasses!

PERSONAL CAMPING EQUIPMENT

① RUCKSACKS

One factor which distinguishes foot expeditions from all the other modes of travel is that **all food & equipment is to be carried on your back**. The rucksack should be large enough to contain all your equipment; a **capacity of 65 litres** should meet all these needs. Tough polyurethane proofed nylon is a suitably robust material which will stand up to the wear & tear of everyday use. The pack must be tested for fit & comfort & the **shoulder-straps should be wide & well-padded**. A **well-padded hip belt is essential** in ensuring a better distribution of the load, taking weight off the shoulders & increasing security on steep ground.

② SLEEPING BAGS

It is very difficult for one sleeping bag to cope with all weather conditions. What is known as a **2-3 season bag**, with a **synthetic hollow fibre filling**, should meet all of your Award Expedition needs. It is **bulkier** than a down/feather bag, but it is much **cheaper**, **provides good insulation when wet** & **can be washed** with care. One with box quilting will ensure good insulation & avoid cold spots. A good quality **compressor sack** will greatly reduce the bulk.



③ INNER SHEET BAGS

An inner sheet bag **should always be used with borrowed sleeping bags**. Individuals fortunate enough to own a down bag should regard a lining as essential to keep their bag clean & avoid the necessity of washing. Those with their own synthetic filled bags usually prefer to do without a liner & wash the bag occasionally.

④ SLEEPING PADS

Lightweight hikers today regard sleeping pad as essential. The majority use **closed-cell foam pads** as they are light, robust & relatively inexpensive. They go a long way in ensuring a more comfortable night's sleep & are very effective in increasing insulation against the cold from the ground. **A 2-3 season foam pad should meet all your needs.**

⑤ CHANGES OF CLOTHING

In addition to the spare emergency clothing listed elsewhere, Participants should carry a **complete set of dry clothing**.

⑥ EATING UTENSILS

An aluminium or hard-plastic mug, plate or mess tin with a set of cutlery are all that is required by each individual.

⑦ WASHING GEAR

Soap, small towel, toothbrush, toothpaste & toilet paper or **'wet wipes'** completes the usual list of personal equipment needed. Alcohol-based hand sanitizers like 'Purel' are a great invention & **kill bacteria** on your hands effortlessly.

GROUP CAMPING EQUIPMENT

① TENTS

There are dozens of lightweight tents to choose from. Good quality tents are never cheap, so if it is possible to borrow a tent, do so. **The Award in Bermuda has tents to rent out** and about 80% of Award Participants succeed in borrowing a tent, enabling them to give priority to purchasing the more personal items such as the rucksack or sleeping bag. Before buying a tent, try a few different models out so that you can examine the quality of construction & try it out for size & convenience. Lightweight tents usually hold 2-3 people & the load can be shared between the occupants. Tents usually have an inner tent, a ground sheet & an outer cover, called a fly. With the large variety of tents on the market in different fabrics, it is impossible to make specific recommendations. **It is essential that all tents being used on your expedition are pitched before setting off on your Practice or Qualifying Expedition to ensure that they are complete & that you know how to pitch them, even in the dark!**

② COOKING STOVES

Award Participants should consider their future needs when purchasing a stove. A stove which is looked after will give many years of trouble-free service & may well last a lifetime. **Weight, bulk and efficiency** are the most important considerations, as well as the **availability of fuel**. As with tents, if you are able to use a borrowed stove, take advantage of the opportunity as it will help to guide your choice in any future purchase. **The Award in Bermuda has stoves to rent out.** In Bermuda, cooking stoves are a requirement for **ALL** local expeditions. Award Participants are responsible in confirming with their Award Leaders all cooking requirements for Overseas Expeditions. **Expeditions organised by The Caribbean Award Sub-Regional Council (CASC) cook using open-pit fires.**



③ CANTEEN/COOKING SET

A suitably sized canteen, or a set of pans, will be needed to cater for each tent group. Canteens are of the nesting type where pans, usually 3 in all, fit inside each other with the lid serving as a frying pan.

Finally, it's worth remembering that adding more equipment to the list rarely increases safety - it just increases the probability of succumbing to fatigue, exhaustion & reduces mobility. When faced with difficulties or an emergency, it is most important that Groups make the most effective use of the equipment & resources they have available, or in the environment of the immediate vicinity.

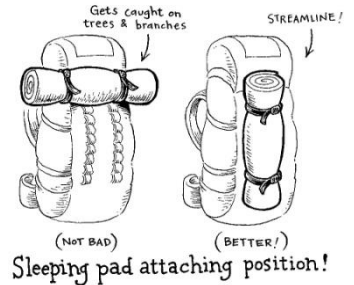
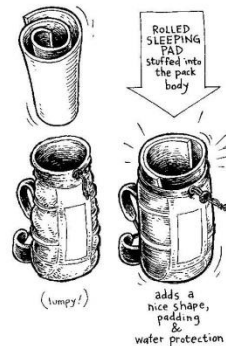
Pooling, sharing & improvising provide solutions to most difficulties. With improvisation, most items in your pack will serve purposes other than those for which they were intended. **Practically all other items of emergency equipment, camping gear or clothing can be utilised to provide solutions in an emergency.**



PACKING A RUCKSACK

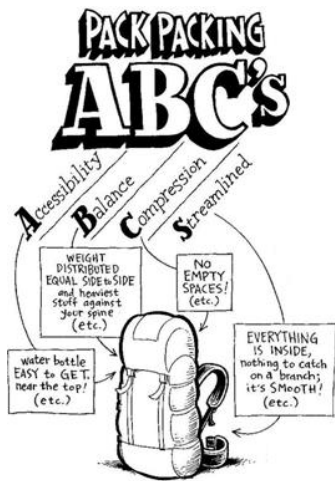
All gear should be carried **within the pack**, with the possible exception of the foam sleeping mat. If tent poles are carried externally, great care should be taken to ensure that they are properly secured in a bag. Another exception is clothing which is being dried while you travel. This will not only add to your future well-lighten your being but load.

Whether you time or the make your day Easy access to depends on keeping the



Sleeping pad attaching position!

are packing your rucksack for the first hundredth, there are a few techniques to go a lot smoother & keep you happier! rain gear, extra layers, water & food your organisation. It's a matter of things that you might need during the ease.

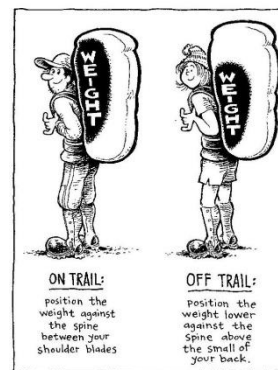


Accessibility + Balance + Compression + Streamline

Begin by laying out ALL of your gear on the floor around you. That way you can see what you have to pack and what you might not need to take with you! **This is all about Accessibility!!** Put items into 3 piles ① what I will need during the day & on the trail, ② what I most likely won't need & ③ what I will only need at camp. Examples of items to keep close by are sunglasses, maps, compass, whistle, snacks, water, rain gear, etc. Items that you can place close by are your First Aid Kit, extra fleece, extra socks, etc. Items such as sleeping bag, pad, tent, cooking gear, etc. can be placed further down into your rucksack as you'll only need access to them once you arrive at your camp site.

The next principle is **Balance!!** You items as close to your back as possible.

easier when the **weight is in line with your body**, not away from it. making your pack too top or bottom heavy. Too much weight at the takes control, pulling you over. Too much weight at the bottom means forward as you walk to balance it! Try to get the heaviest items, like your pack that rides at or just below your shoulders. Keep it close to about side-to-side balance.



want to keep heavy Carrying you pack is Also be aware of top means the pack you have to lean food, in the part of your spine and think

The next principal is all about **Compression!** Fill up all the dead air space with your small stuff. Stick food into pots, socks into shoes, headlamp into extra water bottle...cram, cram, cram!! Take dry food out of its original packaging & put it into a Ziploc bag (remember to take all of the air out first!). Remove food from tins or jars & try to pre-cook whatever you possibly can!

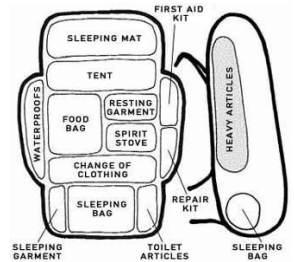




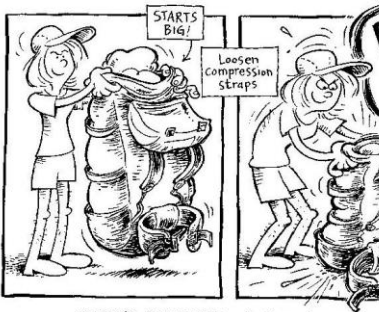
The final principal is about **Streamlining!** Packing a pack is an art and a well-packed pack looks solid from the outside, no dimples or bulges showing. Anything that ends up on the outside of your pack should be well attached & checked on frequently.



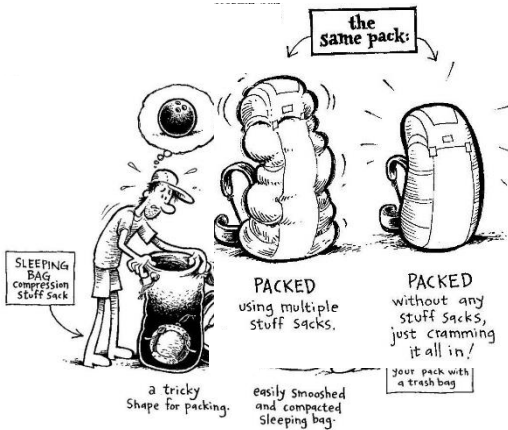
Here are a few helpful hints for you...
and don't forget to invent a few of your own & share them!!!



The BOUNCE method of



* PLEASE REMEMBER ... don't pack your can



WATERPROOFING your PACK

Line the Pack
with a big plastic
GARBAGE BAG
approx 25¢

store-bought
PACK COVER
approx \$25⁰⁰



CONTRACTOR BAGS
work great!
(3-mil, 45-gallon size)
Find 'em at a Hardware store



A WORD ABOUT WATERPROOFING

Water is a very heavy item. A quart of water weighs about 2 pounds, so a pack full of water would be impossible to lift. This is why it is so important to have strategies to waterproof your pack. You can use your sleeping pad to add a layer of waterproofing or simply use a heavy-duty garbage bag (*just be careful not to puncture it!*) You can purchase a waterproof liner for the inside of your pack and/or use a pack-cover to keep the entire pack (*and contents*) from getting wet!

NOTES:

