LIGHTWEIGHT CAMPING AND HIKING

A RESOURCE KIT FOR GUIDES AND LEADERS
Hey!

We’re Alex and Penny, two enthusiastic lightweight campers. We’ve compiled this resource kit for Guides and Leaders to use to learn about lightweight camping. We hope you enjoy the kit and getting out and exploring!

Alex and Penny.

Alex Bennett

I’m a 21 year old Girl Guide Leader who loves the outdoors. Whilst getting away from a hectic life to go camping is great, I particularly enjoy hiking. I like the challenge lightweight hiking provides and learning new skills to live in various environments. As a Guide, I completed both my Queen’s Guide Award and also my Gold Duke of Edinburgh Award. I hold my FD 09 – Expedition in a Controlled Environment Qualifications. Putting this pack together has been the accumulation of many years camping and hiking experience. I hope it helps you learn more about lightweight camping and gives you the confidence to give it a go!

Penny Ferris

Hi, my name’s Penny, and I have been a Guide since I was 8 years old. Throughout my time in Guiding my biggest passion is watching and supporting girls to gain skills that will allow them to become confident and independent. Camping and hiking have a huge role to play in this – giving us the opportunity to get out of the rush of life and taking away the reliance we have on electricity and other people (to cook and clean for you). Hiking also gives us the opportunity to learn more about ourselves, the world and those around us. We hope that this kit provides you with the beginning steps to getting skilled up and ready to start your own adventures with confidence and independence.
Introduction

Welcome to our lightweight resource kit. This kit was born out of an idea and a dream that more girls would get the opportunity to go hiking through Guiding.

As the world gets busier and cities get bigger it can be hard to find the time and the opportunity to get out into the natural world. Many of us do not have the skills or the knowledge to know how to get along without a fridge or esky, we do not know how much water we would use in a day, how to pack enough into a pack for 3 days. Most of us have never had practical experience using a map or a compass, if any experience at all—let alone trying to estimate how long it will take us to walk somewhere with a pack on and know whether we are going to make it to our camping spot in time!

Lord Baden-Powell said “nature study is the key activity in Scouting and Guiding”, we hope that this kit helps you, as Leaders and as Guides, to gain the skills, knowledge and some practical experiences to gain the confidence you need to take hopefully your first step of many into the great outdoors.

What is lightweight camping or hiking?

Lightweight skills are about being able to camp and hike using only the gear that you carry on your back, including food, sleeping gear, your tent, clothes and anything else you need.

Why go lightweight camping or hiking?

There are lots of reasons you would choose to go lightweight hiking. Some people go to achieve a purpose, such as gain a badge or an Award. It might be for the love of the outdoors and to feel a connectedness to nature. Others go just for fun. Beautiful and remote places can only be accessed on foot such as the more southern and northern parts of mainland Australia.

Lightweight camping and hiking will teach you life skills such as independence and confidence in your own ability to look after yourself, you will make new friends, enjoy adventures and get some physical activity and relaxation away from the hustle and bustle of everyday life.

What is this kit for?

This kit is designed as an introduction to lightweight skills. It is full of information, suggested activities, suggested programs and further discussion points to aid you in your lightweight journey. The times suggested are just that, a suggestion and may vary according to the skills, knowledge and experience of the group.

Who is this kit for?

This kit is for anyone with no to moderate lightweight knowledge or experience. It is designed to be able to be used by both Leaders and Guides interested in this area. For those who have some lightweight experience, you are sure to find something new or different.

“At first, I didn't know much about lightweight camping and wasn't sure what it was all about. I learnt it's just building on all the camping knowledge I've already got from Guiding. It wasn't nearly as overwhelming as I thought it was going to be. I was proud of my new skills.”

– Laura
Choosing Lightweight

There are a variety of ways to camp lightweight. Whilst each is based on similar lightweight principles, they differ in the amount of hiking you do and how often you move your campsite.

Established Site

An established campsite has access to running water and toilets. This form of lightweight camping normally involves setting up camp once, staying at the site for the duration of your camp and then packing up when it is home time. This allows you to bring more luxury items as you do not carry them as much.

Bush Site

Bush sites may not have running water or toilets which means you may need to carry your own water and dig your own toilets. These sites are often found in more remote and untouched camping areas and require you to hike in carrying everything on your back. Generally you will stay at the same site for the duration of your camp.

Expedition

Expeditions involve hiking or walking from campsite to campsite. As you spend the majority of your day hiking, you will want your pack to be as light as possible. Although, it is important that you carry everything you require, especially food and water.

If you are hiking, it is important that you carefully plan out your walks day by day before your camp. The last thing you want is to have estimated a walk that is too long for a day and be stuck at dusk, hours from your campsite. As such, you need to examine the distance between sites and the difficulty of terrain in deciding if the walk selected is appropriate to your skill level and wishes. Take into consideration that walking with a large back pack is significantly slower and more tiring than normal walking.

As with choosing a camp site, it is very useful to look at maps and search the internet for information about particular walks or parks when choosing what walk to complete. It is important that you have a clear appreciation of what track and terrain you will be up against before you start your hiking. There are techniques to use including route planning and completing a cross section to help you get a better understanding of the terrain you will encounter (see Map Reading section).

ACTIVITY 1
CAPSITE LOCATIONS

Time: 10 minutes
Equipment: Map
Preparation: None

Look at the following map and see what campsites you can locate. Are they bush or established campsites? With what knowledge of the campsites you have, what precautions would you need to take?

ACTIVITY 2
PLAN A BEGINNER’S WALK

Time: 20 minutes
Equipment: Map, Pen and Paper
Preparation: None

Briefly plan a walk for a beginner group, an intermediate group and an experienced group of hikers. They are away for 1 night each and need to start and finish at the same spot. Where are they going to camp? Why? Make sure the walk is of appropriate length for the different groups.
Treading Softly

While it is fantastic to get out and about in the outdoors, it is important that we remember that the environment is finite and fragile. It is a sensitive and valuable resource which we need to look after to ensure that it is there for future generations to enjoy. We have the responsibility to take care of our environment and encourage and teach others to do the same.

Here are some ways to tread softly in the environment:

Use existing campsites and tracks
Where ever practical, use existing camp sites and tracks. It is easier and has less impact on the environment. They have been made to be used and for specific reasons. Do not cut corners or create new tracks. This is simply to minimise the damage to the environment you are visiting. If you have to travel across untracked ground, it is best that you spread out to disperse any damage to the terrain and vegetation. Remember to leave gates as you have find them and obey any signs you come across, especially those referring to private property.

Protect water resources
We need to conserve the quantity and preserve the quality of water in the bush. When there are more campers around in autumn and summer particularly, the demand for water is high and careless practises can degrade the quality. Make sure you scatter any used washing or cooking water at least 100 metres away from any water source such as streams so that it will be filtered on its way back into the watercourse. It is best to minimise the amount of detergent used to wash up with and use an environmentally friendly one where possible. In general, do your best to use as few chemicals as possible.

Use a stove to cook on instead of campfires
Firewood has become a scarce resource, particularly in popular camping and walking areas. Dead wood plays an important role in our natural ecosystems and provides homes for many of our animals. As such, campfires are now banned in many places, particularly State and National Parks. Where campfires are allowed, use an existing fireplace where possible, ensure the surrounding environment is cleared, keep fire size to a minimum and familiarise yourself with and stick to the fire regulations current in your area. Before you go to bed, make sure your fire is completely extinguished. Use water to do this where possible. To check the ashes are sufficiently extinguished, you should be able to touch them with your hand. Scatter the ashes before you leave.

As an alternative to cooking on an open fire, modern stoves are efficient, quick and easy to operate. They are lightweight, clean, good in wet weather and safer than open fires in high fire danger periods. They are the more environmentally friendly option.

Bury toilet wastes
Where ever possible use the toilets provided at campsite and along the walks. In areas without toilets or where they are full, you need to bury your faecal waste and toilet paper at least 100 metres from any campsites, tracks and water sources. Dig a hole about 15cm deep, not including snow where applicable. Sanitary pads and tampons need to be carried out as they are not safe for the environment. For more information, see Hygiene and Toilets section.

Carry out all rubbish
What you carry in, you must carry out. Therefore, it is helpful to think about the amount of rubbish you will gather as you plan your trip. You need to consider the packaging of your food products when deciding your menu and what you purchase. It is essential that you carry out all your own rubbish and do not leave behind anything including food scraps. To further protect our environment, clean up the waste left behind by other inconsiderate bush visitors.

Some National and State Parks have specific restrictions. Check out if this is the case where you are going so you do the right thing.

ACTIVITY 1
TREADING SOFTLY PERFORMANCE

Time: 15-20 Minutes
Equipment: Pen and Paper
Preparation: None

In Patrols, create a song, rhyme, poem or skit about treading softly and perform your creation to each other.

Equipment
Things to think about when choosing equipment are price, quality, effectiveness, comfort, weight and ease of use.

Tent
The best tents for lightweight camping are small and light. Good tents have a strong, waterproof, sewn in floor and have vestibules to store your packs in. Don’t rush out and buy one though. It is most likely that you will be able to borrow a suitable tent from family, friends or a Guide Unit. Most often you share your tent with others when lightweight camping and hiking so taking two- or three-man tents and dividing it amongst your group is ideal.
Practise putting up your tent before you go out camping. It is good to know how to put up the tent you are using, especially if it is borrowed or raining. Also check you have all the parts and sufficient tent repair equipment such as duct tape and adhesive repair patches! There is nothing worse than having to put up a tent for the first time in the rain or the dark and finding that you don’t have all the bits needed.

Sleeping Bag
It is essential that you take a good sleeping bag that is long enough to cover your entire body including your head. Sleeping bag liners are an inner sheet typically made of cotton or silk. They are designed as an extra layer of warmth with little weight or size and are easily washed.

Waterproofing and compacting your sleeping bag:
Your sleeping bag is one item you do not want to allow to get wet for your own comfort and safety. Before you stuff your sleeping bag in its container, line the container with a heavy duty garbage bag. Now stuff your sleeping bag into the container and garbage bag liner. Whilst holding the top of the bag closed, squash you sleeping bag by sitting, kneeling or lying on it so you squash out as much air as possible without tearing the bag. Twist the top of your garbage bag and secure. You now have a smaller and waterproof sleeping bag. Whilst this does take a bit of effort, you will appreciate jumping into a dry sleeping bag if you have been in the rain all day.

Down sleeping bags compress smaller than synthetic sleeping bags but this technique will be helpful for all sleeping bags.

Sleeping Mats
There are no hard and fast rules about what type of sleeping mat to take lightweight camping. You can get both foam and air filled (Thermo rests) mats. It is a matter of personal preference and cost. It is possible to buy small mats, either narrower or shorter for those serious about saving space.

Cooking Equipment
See Cooking Equipment section.

Lighting
Head torches or head lamps are torches designed to be worn on the forehead. These are fantastic as they allow you to have your hands free. They come in a range of models with different sizes and strengths of light. If you don’t have a head torch, a normal torch is fine. This is often your only source of light, so make sure it is reliable. In both cases, make sure you have sufficient batteries plus some spares!

Mobile Phone
You may choose to carry your mobile with you. It may be of assistance in an emergency. Switch it off to save battery and keep it waterproof.

Back Pack
Finding a suitable back pack is much more important if you are hiking compared to camping. An important distinction to be made between pack designed for backpacking or travelling and ones designed for hiking. Hiking packs have an internal frame with wide shoulder straps and a firm, padded hip belt.

Your pack needs to fit everything you need to take and be comfortable. Make sure it fits properly onto your back.

Finding a back pack to hire with can be challenge yet there are places where you can hire them, for example bushwalking stores.

When you divide your equipment up between your group members, think about the weight and size of the portions to make it fair.

This camping equipment can be expensive to buy outright. Work with what you have got and borrow what you don’t have. Don’t let a lack of appropriate equipment stop you lightweight camping. Before you know it you will have a collection of your own lightweight camping gear!

ACTIVITY 1
WATERPROOFING PRACTICE

Time: 10 minutes
Equipment: Sleeping Bag and Garbage Bags
Preparation: None

Practise waterproofing and packing your sleeping bag as per the instructions on previous page.

ACTIVITY 2
TENT RACES

Time: 10-45 Minutes
Equipment: Tent and Blindfolds (optional)
Preparation: None

Practise putting up your tent. Have a race against the clock or another patrol. It you are up for a big challenge, do it blindfold (but make sure you have some supervision and assistance available if necessary.)
Cooking Equipment

There are various types of lightweight cooking stoves you can choose to use when camping. Each have their strengths and limitations. They are preferable to campfires for convenience and conservation reasons. Please check local rules and regulations before choosing cooking equipment that will be used on your hike.

**Methylated Spirits Stove (e.g. Trangia)**

This is a very common choice for lightweight cooking. They are easy to operate, reliable, comparatively safe and the fuel is widely available. Additional pots and replacement parts are easy to obtain. Cooking on these stoves is rather slow particularly in cold conditions or at altitude and you are often required to carry a relatively large amount of fuel.

Gas conversions are available for Trangias. You can also get Teflon coated Trangias, however it means they can’t be scrubbed clean as you will scratch the surface.

**Gas Stove**

Portable gas stoves are another choice for hiking cooking equipment. They contain a fuel tank or cartridge that contains liquefied gas held under pressure. They are very convenient with immediate high heat output. The temperature is easily adjustable and such portable gas stoves are easy to assemble and operate. The gas cartridges are rather expensive to replace though. It is not possible to refill the small gas cartridges used in lightweight camping and therefore these stoves are considered to be environmentally unfriendly. They also do not work well in cold and windy conditions.

**Solid Fuel Stoves (e.g. Esbit)**

These burn blocks of firelighter-like material. They are cheap and small but not very effective and are generally not thought of as a stove as such. They are not very safe to use. Nonetheless, they are small and compact and useful for emergencies.

Stoves other than Trangias will require you to carry pots and a frying pan if needed. Other things to think about when choosing cooking equipment are how easily you can control the temperature, how compact is everything, the cost and availability of fuel and spare parts, reliability, weight, stability and does it meet your needs?

You can take detergent, cloth, scourer and an old tea towel if you wish. You can do without all these things or cut them in half, literally. Cleaning can be done with hot water and a bit of elbow grease with a leaf, sand or like. Make sure pots are rinsed with really hot water. A steel wool like Jex can be disposed of in the bush as it will break down easily and won’t harm the environment. Instead of your tea towel, just let your things air dry.

ACTIVITY 3
EXPLORING EQUIPMENT OPTIONS

<table>
<thead>
<tr>
<th>Time: 20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment: Pen and Paper</td>
</tr>
<tr>
<td>Preparation: Bring all equipment</td>
</tr>
</tbody>
</table>

Bring to a meeting all the equipment you think you would take on a hike. Compare what different people would take and discuss why. It might be helpful to make some notes on what you would like to take next time.

ACTIVITY 4
EQUIPMENT WISH LIST

<table>
<thead>
<tr>
<th>Time: 20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment: Pen and Paper</td>
</tr>
<tr>
<td>Preparation: Magazines of equipment and or internet</td>
</tr>
</tbody>
</table>

Make a list of new equipment you would like to purchase. Prioritize this list.

ACTIVITY 3
EXPLORING EQUIPMENT OPTIONS

<table>
<thead>
<tr>
<th>Time: 20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment: Pen and Paper</td>
</tr>
<tr>
<td>Preparation: Bring all equipment</td>
</tr>
</tbody>
</table>

Bring to a meeting all the equipment you think you would take on a hike. Compare what different people would take and discuss why. It might be helpful to make some notes on what you would like to take next time.

ACTIVITY 4
EQUIPMENT WISH LIST

<table>
<thead>
<tr>
<th>Time: 20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment: Pen and Paper</td>
</tr>
<tr>
<td>Preparation: Magazines of equipment and or internet</td>
</tr>
</tbody>
</table>

Make a list of new equipment you would like to purchase. Prioritize this list.
**ACTIVITY 1**
**BOILING WATER TEST**

*Time:* 15 Minutes  
*Equipment:* Different stoves with fuel and 1 cup measure  
*Preparation:* None

Using different types of cooking stoves and in a safe location outside, boil 1 cup of water and time how long it takes. Also take note of the stability and ease of use of each stove. Which do you prefer?

**ACTIVITY 2**
**TRANGIA PRACTICE**

*Time:* 1-2 hours  
*Equipment:* Stove, fuel, cooking equipment, dilly bag  
*Preparation:* Shop for ingredients

Outside in a safe location, try cooking the following meals on a lightweight stove.

- **Beginners** – 2 minute noodles and instant pudding (bought from supermarket)
- **Intermediate** – a packet pasta meal from the supermarket and a pudding in a bag (handmade)
- **Advanced** – Pasta meal from scratch and custard

**ACTIVITY 3**
**TRY ADVANCED TRANGIA MEALS**

*Time:* 1 hours per meal  
*Equipment:* Stove, Fuel, Cooking Equipment, Dilly bag  
*Preparation:* Shop for Ingredients

Try to cook on an outdoor stove some of these more difficult meals. These should be undertaken by advanced individuals.

- Pancakes
- Fried Rice
- Sausages
- Bacon and Eggs
- French Toast

**ACTIVITY 4**
**TRANGIA CLEANING KIT**

*Time:* 10 minutes  
*Equipment:* Scissors and Pen  
*Preparation:* Purchase items

Make a cleaning set to be kept inside or with your stove. In a small zip lock bag, put the follow:

- Half a sponge with scrubber on the back
- Half a jex and / or one steel wool
- Some matches in a waterproof container (don’t forget the scratch side)
- Very small bottle or container of dishwashing liquid

It’s a good idea to label it with your name!
Food and Shopping

Food is the main energy source for exercise and maintaining body temperature, therefore it’s important to eat wisely. On camps and hikes, food can also contribute significantly to the morale of the group by providing a pleasant social end to a hard day. Remember that you are likely to expend more energy whilst hiking and camping than during a normal day. This must be reflected in your food choices.

It is advisable to work in small groups of two or three to organise and cook your food. Working in small groups allows you to tailor a menu to your liking, share carrying food and cooking equipment between a few people and cook together.

Food on hikes does not need to be boring and tasteless. Your imagination is the limit. You must carefully consider each item you take however. Some important things to remember when choosing and shopping for food for lightweight camping or hiking are:

- Weight
- Volume
- Cost
- How well it travels
- Water requirements
- Nutritional Value
- Packaging
- Longevity

It is important that you take some spare food just in case of an emergency. It is a good idea to have enough food to last another 24 hours. As it is unlikely that you will use this food, it doesn't have to be too exciting; just as light and small as possible.

Lots of people take Scroggin hiking. You can make Scroggin with whatever takes your fancy, all sorts of dried fruits, lollies, nuts, grains, oats and chocolate. It is best kept in a zip lock bag.

Soup is a great entree or snack and is quick and easy to make. Use either a packet of soup mixture or a stock cube.

ACTIVITY 1
SUPERMARKET CHALLENGE

Time: 45-60 minutes
Equipment: Pen, Paper and Calculator
Preparation: None

This is a supermarket challenge. In pairs, you need to gather the ingredients to cater for two people for a two day, one night hike (2 x lunch, dinner, breakfast and snacks). You have $30 to spend. You are not allowed to exceed 3kg in total food weight. Remember to return all items you don't keep to appropriate shelves.
### ACTIVITY 2
**MILK TASTE TEST**

**Time:** 10 minutes  
**Equipment:** Cups, Spoons and Water  
**Preparation:** Purchase various milks

Make up various milk powders by following the instructions on the back of the packets. Try them and various types of long life milk without seeing which is which. This is the best way to find out which brand of milk you like the best.

### ACTIVITY 3
**FOOD PACKAGING CHOICES**

**Time:** 30-40 minutes  
**Equipment:** Scales, Pen and Paper  
**Preparation:** Purchase various items

Compare the following items on their weight, volume and nutritional value. Take a guess at which is lighter and check using scales. What is the difference between the items without the packaging? Which would you take?

- Long life milk vs. Milk powder and required water for same volume of milk  
- Tuna Sachets vs. Can of tuna  
- Self-packaged box of cereal vs. Zip lock bag of decanted cereal  
- Tin of fruit vs. Plastic tub of fruit vs. Dried fruit vs. Fresh fruit  
- Tea / Coffee / Hot chocolate / sugar sachets vs. In a jar vs. Decanted into zip lock bag  
- Instant pudding vs. Weight Watchers powdered pudding

### ACTIVITY 4
**DEHYDRATION**

**Time:** 30 minutes to setup. Hours to hydrate  
**Equipment:** Dehydrator, Chopping Board, Knives  
**Preparation:** Purchase food

Dehydrate some fruit or vegetables. Instruction for dehydrating times come with the machine or can be found on the internet.

### ACTIVITY 5
**FOOD DISCUSSION TOPICS**

**Time:** 15 minutes  
**Equipment:** Pen and Paper  
**Preparation:** None

As a small group or a Unit, decide whether the following statements are true or false and provide some reasons why.

- It is better to pack less food so that your pack is light  
- It is ok to eat chocolate at every meal.  
- It is not possible to take meat hiking.  
- Wraps or flat bread and nutella are a good lunch because it is low GI and is a good source of energy and carbohydrates.  
- Powdered milk is an ok substitute for fresh milk.  
- It is better to eat a regular muesli bar than a natural nut bar when hiking because it has more sugar.  
- It is ok to substitute dry fruit for fresh fruit.  
- Surprise peas can fix most meals.  
- Easy Mac is a good, quick and easy meal for my Patrol’s dinner.  
- Eating tins of baked beans whilst hiking for most meals is a good idea.  
- It is not necessary to take a Trangia hiking.  
- You have to eat meat at every meal to get sufficient protein.  
- Eating an apple and an Up & Go for breakfast is sufficient.
Menu Planning

Here are some suggestions for what you can eat lightweight hiking. Remember, you will get hungry with the physical activity you undertake.

**Breakfast**
Muesli or cereal with milk powder, corn thins / rice cakes, fruit, Up & Go.

**Lunches**
Flat breads, salads or corn thins with tuna / salmon in a pouch, salami, carrot, cucumber, tomato, avocado, spinach leaves.

**Dinner**
Rice, pasta, noodles, couscous with a sauce in a pouch. Add snow peas, dehydrated peas and corn, capsicum, onion, carrot, squash. Dehydrated food pouches from camping and outdoor stores.

**Dessert**
Custard made out of powder or out of a sachet, chocolate, fruit.

**ACTIVITY 1**
**DREAM UP A MENU**

**Time:** 15 minutes  
**Equipment:** Paper and Calculator  
**Preparation:** None

Before reading about Food, Shopping and Menu Planning, plan a menu for a hike of 3 days and 2 nights. You have a Trangia.

**ACTIVITY 2**
**MENU REVISION**

**Time:** 15 minutes  
**Equipment:** Pen and Paper  
**Preparation:** None

Having read the information provided on Food, Shopping and Menu Planning, replan your menu. Make whatever changes you feel necessary. Have a discussion with your peers about what you have learnt.

**ACTIVITY 3**
**NUTRITION EVALUATION**

**Time:** 15 minutes  
**Equipment:** Pen and Paper  
**Preparation:** None

Using your revised menu, think about the nutritional value of your meals. Have you covered sufficiently all the major food groups, taking into account the extra needs for your activities.
**Water**

As a general rule, an active person should drink approximately 2 litres of water a day. However, this can rise to 3 or 4 litres of water during hot weather. Our thirst is not the best indicator of the amount of water to drink, because when you are thirsty you are generally beginning to become dehydrated. Therefore, it is suggested that you make sure you drink slightly more water than you think you need especially in very hot and very cold weather. Make an effort to continually drink all day especially when hiking for a number of hours a day.

It is important that you establish before you leave whether there is water available to you at camp sites and whilst you are walking. While maps do give you an indication of whether camp sites have water access, these can be out of date or incorrect. You do not want to turn up at your campsite relying on the tap you saw on your map to find it broken and unusable. Therefore you must make every effort to confirm information about the availability of water through contacting authorities who maintain National or State Parks or by asking those who know the area well.

If you are unsure or know that you do not have access to fresh drinking water, you will need to prepare yourselves to carry or purify water. Wine casks, water bladders and camel backs are ideal for carrying water. PET bottles can also be used but are bulkier, easily broken if dropped and aren’t so easy to store compressed if empty. Ideally water containers should be see through to enable hikers to see how much water has been drunk. It is a good idea to estimate how much water you need per day per person when carrying your water to ensure you have enough. You need to cater for drinking water, water to cook with and any water used in cleaning, plus some spare. It’s a good idea not to take too much food that required rehydrating if you have to carry in your own water.

Running water that is not downstream from human habitation or grazing is generally safe to drink. Do not consume water that is from a stagnant water source. More and more, water is unsafe to drink due to animal and human pollution and therefore requires treatment.

If in doubt you can boil the water you plan to consume for at least 5 minutes. If concerned about bacterial contamination of the water, iodine tablets can be added or you can use a charcoal filter.

These do make the water taste a little unpleasant. Compact water purifier kits are commercially available which filter both bacterial and amoebic pollutants.


---

**ACTIVITY 1**

**BOILING WATER TEST**

**Time:** 15 minutes  
**Equipment:** Stove to boil water, water, cups and spoons  
**Preparation:** Purchase water cleaning items  

Try different ways of sterilising water. Taste them and see which way you prefer.

**ACTIVITY 2**

**WATER WISE**

**Time:** 15-20 minutes  
**Equipment:** Pen, Paper and Calculator  
**Preparation:** Normal days water consumption  

Estimate how much water you use on a normal day. How much water will you need whilst camping or hiking? Work out ways to reduce your water requirements whilst camping or hiking. What would you do if your campsite has no running water?

**ACTIVITY 3**

**THINK TWICE**

**Time:** 5 minutes  
**Equipment:** None  
**Preparation:** Pre-packaged meals  

Have a look at some pre-packaged meals and see their water requirements. How much water would this leave you for other food, cleaning and drinking?
Maps

It is critical that you have adequate maps for the area you are camping or hiking in. You need to have maps to get to and from your starting and finishing points plus any hiking trails. Make sure your map has sufficient detail so that you can read the terrain, trails and signs clearly. You can get maps from Government Departments, Scout Shops and map resellers. Some maps can be found on the internet, but it is best if you don't rely on these.

Some good places to go to get maps are:

- Melbourne Map Centre
  http://www.melbmap.com.au
- Map World
  http://www.mapworld.com.au
- Wise Maps and Guides
  http://worldwidemaps.spiffystores.com

Photocopy the original map but take both with you. You can mark campsites or hike tracks on the photocopy. Make sure both are waterproof. You can do this by putting them in a plastic pocket and sticky taping the top completely shut.

Make sure you can see all necessary terrain though. Work with the photocopied map; you can fold it. Save your original for emergencies and next time.

Maps can become out of date and inaccurate. Check you have got the most recent map of the area you are going to.

ACTIVITY 1
MAP COMPARISON

Time: 10 minutes
Equipment: Examples of each type of map
Preparation: None

Discuss in small groups or as a Unit the differences between a topographic map and a tourist map. Is a tourist map sufficient for hiking?

ACTIVITY 2
GO BEYOND

Time: Own time
Equipment: None
Preparation: None

Explore either with your Unit or on your own Geocaching and Street orienteering. Also if you have access, learn how to properly use a hand held GPS.

Map Reading

Maps

Nine times out of ten, when you go hiking no-one in your group will have been there before. This is one of the great things about hiking, experiencing new and interesting places that you otherwise would never see, but to ensure you are able to plan and prepare for your hike it is essential that you can read and interpret your map fully!

Being able to read your map means that you will be able to choose an appropriate hike for you and your group’s ability and experience. You will know where the challenges will be, know if you’re going to need to cross water, get through any gates, if there are any toilets along the way, if there are any really steep hills up or down, how far you need to get each day to get to your campsite(s) and how long you think it will take you.

Before you start looking at hikes, learn how to read a map correctly. Start out by reading the legend on the map – how are water points marked, trails, roads, campsites, gates etc. What is the scale of the map, what distance does the map represent.

One of the hardest parts of reading a map is reading and understanding contour lines. Contour lines are the thin lines that you see all over maps, they indicate how far above sea level you are.
Some, but not all of the contour lines will be numbered with the number of meters above sea level. Using these lines you can see where the hills are, how steep they are and whether you will be walking up the hill, down the hill or around the hill.

When contour lines are close together this means that the hill is steep – because the change in height happens in a short distance. Therefore, when the contour lines are further apart the incline or decline is shallow. When contour lines come together to form a “V” shape – this indicates a valley, where as when they join together to create a full circle – this is the top of the hill. Using this knowledge, you can follow the trail that you plan to follow and see how many ups and downs you will do during your hike, how steep they will be and calculate the vertical distance change you will walk. This will help you to estimate the amount of time you will need to allow for each section of your walk.

**Compasses**

A compass is one of those items you MUST pack when going camping, but that sometimes you will find you never touch it. Most of the time, being able to read the map is enough – especially when you are hiking along frequently used, well maintained and signed walks. Often being able to read the map and contour lines will allow you to use features of the land and knowledge of where you have walked to help identify where you are.

However, if you become lost or unsure where you are a compass can give you some essential clues to help you piece everything together. The first thing to do, if you need to establish where you are on the map, is to use your compass to identify north – this is important to make sure you have orientated your map correctly.

If you are in bushland, and you know where you are on the map and where you would like to go, you can use the compass to direct you straight there. Simply place the bottom of the compass base where you are and have the line down the centre of the compass (the directional line / arrow) either point to or cross over the point that you would like to arrive at. Now rotate the compass house (not the compass base) so that north points north on the map. This is called setting your compass.

Once your compass is set pick it up and hold it flat in front of you (the best way to hold your compass is to hold it flat on the palm of your hand at your belly button – this helps to stop you pointing your body in a different direction). Turn yourself around until the north compass needle lines up with the north on the compass – you are now facing the direction you need to walk to arrive at your chosen destination.

It is very important, if you are using a compass in this way, to remember to read the rest of the map and not just the direction. You must make sure that you plan your walk as always – are you going to have to cross a river, walk up or down a really steep hill that is potentially too steep to walk up or down, hit a fence you can’t get through for instance.

**ACTIVITY 1**

**PLAN IT OUT**

**Time:** 20-30 minutes  
**Equipment:** Copies of a topographic map  
**Preparation:** None

As an individual or in groups, look at the map and pick out a trail. Identify the length of the walk and what you will come across along the way (e.g. gates, toilets, river or creek, campsites etc.). Now have a look at the contour of the land – will you walk past a hill or a valley on the left or right, will you be walking up or down steep or shallow inclines or do you walk around a hill or along a valley?

Break the walk up into parts, estimate how long the walk will take you and if you can plan a place to stop for lunch and morning / afternoon tea.

**ACTIVITY 2**

**ROUTE PLAN**

**Time:** 20-30 minutes  
**Equipment:** Copies of a topographic map, Pen and copy of route plan  
**Preparation:** None

Using the same trail you selected in Activity 1: Plan it out, or choosing a different one, fill out a route plan using the template below. This condenses all the information about your trail you are going to hike onto one sheet.

It should live with your map. Break each day down into separate sections. This is normally done around meal times.

**ACTIVITY 3**

**ORIENTEERING**

**Time:** Own time  
**Equipment:** Map and Compass, suitable clothing, water  
**Preparation:** None

Investigate orienteering and give it a go with some family or friends. Contact Orienteering Australia for more information about how to get started or a local club: [http://www.orienteering.asn.au/](http://www.orienteering.asn.au/)
## Route Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>State</th>
<th>From (Grid Reference)</th>
<th>To (Grid Reference)</th>
<th>Distance (km)</th>
<th>Magnetic Bearing</th>
<th>Time Estimated</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clothing

Packing clothing for lightweight camping can be tricky. You need to ensure you take sufficient clothing however you don't want to over pack and carry too many clothes. Therefore you have to pack sensibly for your comfort and safety.

Think about where you are going and what weather you are expecting. Whilst the quantity of clothing will change depending on how long you are going for, the same basics apply. Let's start from your toes upwards.

Footwear

What you are doing and what you have available will influence what footwear you take. Leather or synthetic hiking boots are preferred if you are going on a serious hike. They are sturdy, waterproof, protect your feet and have good grip. Having said this however, runners are ok for hiking and camping.

Runners can become uncomfortable hiking for long distances due to their lack of support for your ankles, especially on rocky terrain. Try to use runners which have good grip.

Never ever go hiking in brand new hiking boots. When you get a new pair of hiking boots you need to wear them in. Wear them around the house (make sure they are clean) or go for some walks with them on to break them in.

Whilst this can be boring and time consuming, this is essential to ensure your comfort and blister free feet; walk your boots in!

"I once wore my new boots hiking and it was disastrous! I had the sorest feet before the end of the first day! Putting my boots on and hiking for another two days was so uncomfortable and painful. I ended up with blisters all over my feet. I have learnt my lesson to always wear in my boots before going hiking!"
- Kate

Socks

You need to have good cotton or wool socks to walk in and to sleep in if you wish. You can get away with walking in the same pair of socks for a couple of days. Put dry socks on to sleep in though.

Gaiters

Gaiters are garments worn over the top of your shoes and cover your lower leg. They are useful for protecting your legs from branches and preventing mud or the like from entering the top of your shoe. They are optional.

Pants and Shorts

Most important when you are hiking or camping is your comfort. You will be active the whole day so you need to be free to comfortably move around. Whatever the time of year, you need to take pants and shorts. You can get very warm walking yet cold at night.

Jeans are a definite no. Avoid heavy materials that take a long time to dry and a lot of space in your pack. Some people find leggings a useful, lightweight and comfy option. Pants that have zip off sections which turn the pant into shorts are another good option.

PJs

If you can get away with it, don't take a pair of your flannel PJs. A t-shirt and shorts is sufficient. You will have pants and jumpers to wear if you are cold.

Thermals

Thermals are warm undergarments. They are fantastic as they are lightweight, quick drying, breathable and extremely versatile. You can get thermal pants (unattractive but fantastic) and a range of thermal tops (long sleeve, short sleeve and vests). They are a very good investment. It is strongly recommended that you do not go lightweight camping without a set of thermals.

Underwear

Most important thing here is comfort. Take ample changes, especially if you have your period, as it is unlikely you will bathe.

T-shirts

You need to take a number of t-shirts and long sleeve tops. It is recommended that you do not camp or hike in singlet tops or the like. Not only will you get sunburnt, but carrying a backpack for several hours on bare skin can be extremely uncomfortable.

Jumper

It is important that you have a good quality jumper. Polar fleece or wool are the best. Avoid taking light cotton hoodies or fashionable jackets. Practical and warm are best here.
**Beanie and gloves**
These are optional but can be very handy. Again, go for wool.

**Hat**
This is essential and should be lightweight but adequate to shelter the face and neck from the sun.

**Waterproofs**
Regardless of where or when you are camping or hiking you must take a raincoat. Take a raincoat, not a poncho. Not all raincoats are waterproof. A substantial and proper raincoat will keep you warm and dry. Top end raincoats are also windproof.

It is also possible to get waterproof pants. They are not the most flattering item to wear but are extremely practical. Good waterproof gear should mean you can wear it and your clothes underneath will stay almost completely dry.

---

**ACTIVITY 2**
**WEATHER RELAY**

**Time:** 15 minutes
**Equipment:** Selection of gear for each Patrol
**Preparation:** List of weather scenarios

Have patrols compete in this activity. One member of each patrol is to be the model. The Leader is to call out the weather conditions or scenarios and the patrol must dress the model according to the instructions. The fastest patrol to have their model in appropriate clothing scores a point. The team with the most points at the end wins.

Some suggested calls are:
- It begins to rain
- You are getting dressed to pack up your camp site
- You are just about to start walking for the day
- Making dinner whilst the sun sets
- Stopping for a 15 minute rest mid-walk
- Mid way through a day hike

Add some of your own:

---

**First Aid Kit**

Hopefully you will not need to open your first aid kit, but it is essential you take a well stocked one. You should be familiar on when and how to use all the items you carry in your first aid kit. Each individual should carry their own kit. Tailor your first aid kit to your specific needs and trip. Put all your items in a labelled zip lock bag so they stay together, compact and dry. Below is a list of suggested items. You may wish to add or remove some.

- Rubber gloves
- Bandaids
- Blunt tipped scissors
- Tweezers
- Strapping Tape
- Crepe (at least 2) and elastic bandage
- Triangular bandages
- Sanitary pads
- Alcohol wipes
- Salt

---

**ACTIVITY 1**
**RAINCOAT TEST**

**Time:** 5 minutes
**Equipment:** Source of water
**Preparation:** None

Outside, test each other's waterproof raincoats by spraying each other with water or tipping a bucket of water over them. Be careful not to waste too much water!
ACTIVITY 1
FIRST AID KIT CHECK

Time: 15 minutes
Equipment: First Aid Kit
Preparation: None

Go through your first aid kits for lightweight camping or hiking. Check not only that you have everything you will need but that you know what to use it for and when. Ask your Leader or another First Aider if you don’t know when or how to use something.

ACTIVITY 2
WHAT IF..?

Time: 25 minutes
Equipment: None
Preparation: None

Go through some ‘what if...’ situations in small groups or with your Unit. Discuss what you would do in each situation and what equipment you would need. Some examples include:

- You get a leech on you
- Your friend develops diarrhea
- You roll your ankle
- You hurt your back carrying your pack
- You have unbroken blisters
- You are bitten by a bull ant
- You have a headache

Add some of your own:
Emergency Kit

An emergency kit is different from a first aid kit. It contains a variety of practical items that would be useful in an emergency. Like a first aid kit, it is useful to store the contents in a labelled zip lock bag. Below are suggested items and an explanation of the possible use of each item.

- Candles – source of light and fire
- Extra waterproof matches or cigarette lighters – source of fire
- Pencil or texta and Paper – to record important information
- Whistle – to use if lost
- Torch
- Favourite chocolate bar wrapped in duct tape or the like – a source of sugar. Wrapping it up means you are less likely to eat it as a snack, yet you can still get to it if you really need to. You’re more than welcome to eat it in the car on the way home.
- Space blanket – protection from cold and wind
- String / cord / pantyhose – can be used as a clothes line or for securing or repairing
- Safety Pins – very handy
- Duct tape – repairing or securing things
- Rubber bands
- Cable ties
- Spare plastic, garbage and zip lock bags – You will use these to repair, waterproof or carry things

“You never know what will happen on camp and your emergency kit is full of useful bits and pieces. In my experience, rubber bands and spare plastic bags are especially useful!”

- Gemma

ACTIVITY 1
EMERGENCY SOUNDS

Time: 20 minutes
Equipment: Whistle each
Preparation: Information on whistle signs

Learn whistle signs that might be handy for lightweight camping or hiking.

Hygiene and Toilets

It’s important to think about your hygiene whilst you’re out camping or hiking for your own health and both your own and your companions comfort. There are some simple ways to ensure you look after yourself whilst out exploring.

If there is a toilet available, use it, even if it is a smelly drop toilet. The park rangers ensure that this waste is composted correctly and that it does not pose a health hazard. If a toilet isn’t available, make sure you go at least 100m away from any water sources. Be considerate about where you go.

Make sure it’s not where someone is going to camp, cook or sleep. For number twos, dig a hole 15cm deep. Bury all waste and place a rock or branch over it to stop animals digging it up. You can either bury any used toilet paper as it degrades over time or carry it out. Try and use environmentally friendly toilet paper and as little as possible. Be prepared for your period. Sanitary items must either be burnt and buried or carried out.

It is important to remember to wash your hands regularly whilst out camping. You can also use antibacterial hand sanitiser. A quick sponge bath with a towel and some water or a Wet One can make a big difference. Wet Ones must be carried out though. Take care not to use soaps or shampoos that could contaminate rivers or lakes you swim or wash in. There are biodegradable soaps available which are best to use.

Do not bathe in rivers which are used as a water source. Clothes can be hung out to air once you have arrived at camp which can reduce odour. Deodorant is always good to take.

Don’t forget to brush your teeth twice a day. You can chop off the end of your tooth brush handle and take either travel toothpaste or a kids’ tube of toothpaste. It’s ok to rinse into the bush.

Make sure you wash your dishes thoroughly in hot water to ensure they are kept as clean as possible. This is to reduce illness.

ACTIVITY 2
TINY BUT USEFUL

Time: 15 minutes
Equipment: Emergency Kit, Pen and Paper
Preparation: None

How small can you make your emergency kit in terms of number of items taken whilst still being useful? Why did you take out what you did? Can you think of anything else you would want to take?
Packing Your Bag

Packing your bag can be one of the most challenging parts of lightweight camping. It is somewhat of an art form that you will perfect over time. There are some basic guidelines to get you started, but how you arrange and carry your pack is quite personal and varies between campers. There is a pictorial guide as to the weight distribution of a pack (next page).

- Line the inside of your pack with a large heavy duty garbage bag. This waterproofs your pack.
- Try to fit everything inside your pack. It should be possible if you have a suitably sized pack. It isn’t ideal to have your sleeping mat or parts of your tent on the outside of your pack. They can get caught of vegetation, get wet, damaged or lost and make the weight of your pack lopsided.
- Think about the weight distribution of your pack as you pack it. You do not want one side, for example the left side to have all the heavy items in it, such as fuel, stove and water bottles.
- Pack the heavy items so they are close to your lower back.
- Some people like to separate out their clothes and each day’s food into separate zip lock or plastic bags. This can make it easier to find items that go together.

- Use small Tupperware containers or film containers for small amounts of detergent, jam, oil, sugar or the like.
- Make sure you remove as much packaging from your food as possible to minimise the amount of rubbish you need to carry out. Transfer food into zip lock bags to make it smaller and lighter and write any cooking instructions on the zip lock bag.
- It is smart to pack the items most used during the day and those that might be used in an emergency at the top of your pack. These include waterproof gear, first aid kit, snacks, map, torch and jumper.
- Your sleeping mat can be deflated and unravelled to line the inside of your pack. Then pack inside the sleeping mat. This offers some extra cushioning against your back.
- Don’t leave any little spaces. Stuff your clothes and small items into any little spaces, especially around your sleeping bag at the bottom of your pack. Feel the outside of your pack to see if there are any gaps left as you pack.
- Generally people pack their sleeping bag at the bottom of their pack, then the tent (close to your back), cooking equipment, spare clothes, food and then essentials closest to the top.
- Tick things off the packing list as you gather them and again as you actually pack them.
- It is important to check 5-15 minutes into each day’s hike that everyone’s pack is comfortable. Don’t be afraid to stop the group and re-adjust your pack. Stop and rearrange or adjust your pack to make it more comfortable. There’s nothing worse than walking a whole day with an uncomfortable or even painful pack!

ACTIVITY 1
ESSENTIALS ONLY

Time: 25 minutes
Equipment: Pen and Paper
Preparation: Copies of Packing List

Using the packing list provided on page 25, write the answers to the following questions. Share and discuss your answers with your Unit. What would you do if:

- You can only take 15 items
- You need to remove 5 items
- You need to remove 10 items
**ACTIVITY 2  
PRACTICE PACKING**

**Time:** 30 minutes  
**Equipment:** Everything to pack  
**Preparation:** Pack and all items

Practise packing your pack.

---

**ACTIVITY 3  
EASY ACCESS**

**Time:** 5 minutes  
**Equipment:** None  
**Preparation:** Copies of packing list

Have a think about what items would be important to be located at the top of your pack for easy access. Discuss the different opinions with your group members.

---

**ACTIVITY 4  
REARRANGE**

**Time:** 30 minutes  
**Equipment:** Various Packs and equipment  
**Preparation:** Items to Pack

Try packing different style packs with the same equipment and try them on. Rearrange how you packed the contents and see how it makes a difference. Find how you like to pack your pack and which style of pack you like best.

---

**ACTIVITY 5  
Packing Race**

**Time:** 30 minutes  
**Equipment:** Various Packs and equipment  
**Preparation:** Items to Pack

As individuals, each with a fully packed pack, go through the following scenarios. The winner is the individual who has completed the instructions, repacks their pack and has it on their back the quickest.

- All of a sudden it starts to rain and you need to put on your raincoat without letting too much rain get into your pack
- You stop for a rest and want to get a snack
- Have a drink
- Your friend has fallen over and you need a first aid kit
- You're lost and decide to get your compass out to help locate where you are

Add some of your own:

- 
- 
-
Hints and Tips

Zip lock bags
Put things in zip lock bags. Some people prefer to put the majority of their belongings in zip lock bags including clothes. Others just bag certain items. Whatever you wish to bag, zip lock bags are a camper’s best friend. They come in many sizes, keep your belonging together, can be labelled, can store food and keep things dry. Make sure you take some spares with you, just in case you need some extras or some break.

Some items to pack if you have some space left over:
Lip balm – very appreciated
A pair of thongs or sandals – it is very nice to take off your boots when you get to camp after hiking for a day and not have to put your boots on in the middle of the night for a toilet run.
Games – a pack of cards or Yatzee are favourites. They are small to pack yet can provide hours of fun

Shoes
Volley's, school shoes or Doc Martins are not suitable for hiking. If you do not have hiking boots, take runners.

Get to know each other before you leave
It is a good idea to play some getting to know you or initiative games or activities if you have a diverse group of Girl Guides hiking together. You will be spending a large amount of time together, so it’s a good idea to break the ice early and begin to get to know each other. They can just be a quick 5 or 10 minute game before starting each day’s hike.

Spare clothes
If possible, pack a spare set of clothes and comfortable shoes to leave in the car that is picking you up. After your hike and before you jump in the car for the drive home, you can change into some clean, dry clothes. You may also pack some snacks for the drive home.

Practise walking
Practise walking with your boots and pack on around your neighbourhood. See how comfy they both are. The more practise you do, the easier hiking will be.

“I went for a short walk with my pack on before I went hiking for the weekend. I found I needed to rearrange my pack a bit. I was so glad I tested it out before I went off!”
- Julie

Packing List

- Pack and pack cover
- Tent (Check you have all the pieces)
- Sleeping bag (and liner - optional)
- Sleeping mat
- Torch and batteries
- Map
- Compass
- Food
- Cooking stove, fuel, pots and cleaning products
- Dilly bag/Mess Kit – bowl, cup, spoon, fork and knife
- Water bottles / carrying containers
- Boots / runners + Spare (can be thongs or sandals)
- Socks
- Pants and shorts
- T-shirts
- Jumpers
- Beanie and gloves
- Hat
- Thermals Underwear (plenty)
- Waterproof raincoat and over pants
- First aid kit
- Emergency kit
- Pens, Pencil and paper
- Small hand towel eg. Chux
- Sunscreen
- Insect repellent
- Toiletries – including sanitary items, deodorant and hand sanitiser
- Toilet paper (in zip lock bag)
- Small shovel / Trowel
- Medication
- Some form of personal identification

Optional extras
- Mobile phone
- Gaiters
- Camera
- Thongs / sandals
- Small chair
- Games
- Swiss army knife
Gather your items together at least one week before you leave. This will give you plenty of time to remember the things you were going to forget and rethink what you should and shouldn’t take with you.

**Group Management**

Lightweight camping and hiking can be challenging at times. Whilst you are out and about, look out for the others around you. Ask them how they are going and help others where you can. That said, ask others for assistance if you need it whether it is physical or emotional.

You can choose to elect a leader for each day. They may take on roles such as map reading, time management and group care. A good leader will be able to resolve conflicts should they arise, build and maintain group morale, motivate people and be able to educate others on lightweight camping skills.

Simple activities like singing or playing games whilst you hike can help time pass, take people's mind off things and fade the blues away.

It is a good idea to plan a rough schedule for each day before you leave and evaluate it each morning. In addition, your group may come up with some walking rules. You may feel comfortable separating your group and deciding from the outset where you will stop and regather. Alternatively, you may wish to walk as one group with a leader at the front and a whip up the back. You could have the same people in these roles each day or change during the day. It is always a good idea to stop at track junctions to make sure you have everybody and are travelling along the same path.

Don’t forget to evaluate extensively when you get home. It’s really important you debrief the hike. Think about things like did you meet your objectives of the hike or camp? Did everyone enjoy themselves? What did you learn? What would you do differently next time? You will learn most through experiences, so don’t let yourself forget the valuable lessons you learn!

**ACTIVITY 1 TIME FILLERS**

**Time:** 10 minutes  
**Equipment:** Pen and Paper  
**Preparation:** None  

Brainstorm some ways to pass time while you are at camp and walking.

**Campsite Layout**

Once you are at your campsite for the night, it is important you take some time to think about the layout of your site. There are a variety of things to consider when choosing your site to maximise your comfort, remain safe and look after the environment.

For a peaceful camp, it is a good idea not to pitch your tents on any pathways or main thoroughfares. Being close to toilets has its advantages in that it’s not too far to walk at night and yet disadvantages are busy traffic and unpleasant smells. A compromise is suggested. However, it is advantageous to be close to the water supply if applicable.

The campsite ideally needs to be big enough for your tents and cooking areas. Your cooking area should be at least 3 metres clear of your tents and vegetation. Level ground or ground with a slight slope for drainage is best to sleep on. As with any camping, grass is the most comfortable. It is advised to scan the ground where you wish to pitch your tents and site in general, for any insect nests, uncomfortable rocks and sticks and holes in the ground which will fill with water if it rains.

As always, do not camp under trees or overhanging branches. Finding a site that is sheltered by trees and shrubs can provide you with protection from the elements.

It is strongly advised that you do not camp within 100 metres of any water’s edge (river, stream, lake or beach). Firstly, this is to ensure that any food and human waste products do not make its way into the water. Secondly, these areas are generally more damp, prone to flooding in extreme weather conditions and are breeding grounds for mosquitoes.

**ACTIVITY 1 WHERE TO CAMP**

**Time:** 10 minutes  
**Equipment:** Pen and Paper, Map (right)  
**Preparation:** None  

Below is an aerial map of a campsite. There are several possible sites to choose from at this campsite. Which one would you choose for a group which has three tents and needs a cooking area? What are the advantages and disadvantages of this site?
Group Blue camped at the site marked with a blue ‘X’. They have 4 tents in their group. Do you think this was a good decision? Why?
What to do When...

You think you are getting blisters

Blisters are terrible! Not only are they painful, but they can effect the mobility of the whole group. The most important thing here is to prevent them happening in the first place. Make sure you take the time and have the resources to look after your feet.

To prevent blisters, it is best to strap the heels of your feet and any points where your shoes rub over time. Band-aids do not work by themselves as they simply rub off quickly. Some people also wear two pair of socks to prevent rubbing (a thin pair, then a thick pair). If you feel a blister forming, stop and tape the area. It is best for you and your whole group in the long run and your group will enjoy the short break.

If you already have formed or broken blisters, it is best to leave them alone. Place a non-stick dressing such as Melolin over the blister and cover with tape.

You are cold or it becomes extremely cold

Exposure to cold creeps up on you and may be overlooked initially. Again, prevention is the best thing. Make sure you eat well, especially before heading to bed. Stock your body up with plenty of energy. Shelter yourself from the wind in terms of the clothing you wear and your location. Wear your waterproof / windproof jacket and locate your tent in a sheltered area if possible.

Stay dry. Wet clothing “wicks” the warmth from your skin. Make sure you always wear dry clothes. Ensure you have dry clothes by wearing your waterproof gear if it is raining, put your clothes away properly and waterproof everything in your pack.

Layer your clothing. The best combination of clothing is as follows: Thermals, an insulating wool or fleece layer and then your water / wind proof gear. When you stop, put on an extra layer of clothing before you feel cold.

Be aware of early signs of coldness or hypothermia such as tiredness, shivering, loss of coordination and lagging behind or stumbling.

You are hot or it becomes extremely hot

Being active in hot or humid weather challenges our body’s cooling system of evaporation.

Before you begin walking and whilst walking, drink plenty of water. If it is very hot weather avoid being active during the middle of the day. Be sun smart; wear a hat, suitable protective clothing and use sunscreen.

Stay in the shade where possible and remove any unnecessary clothing. You need to be careful of heat exhaustion or heat stroke. Early warning signs are thirst, cramps, headaches, weakness and feeling faint.

If your group becomes separated

Firstly, what members remain of the group should remain together. They should search the immediate area, the track just travelled and any tracks that could have been mistakenly taken.

After a few hours and / or darkness, it is unlikely the missing person/s will be located and you will need to seek external assistance. If you can’t contact the police by phone, a competent subgroup should be sent for the nearest help, with the others remaining as visible as possible near the last point of contact.

If your group becomes lost

Stay together with your group. The best strategy is to stay calm and think. Identify your last confirmed position and estimate your present location. You can retrace your steps. Alternatively, you can proceed to a known landmark such as a road or river. If unsure, make contact with the police. Stay where you are, remain calm and seek shelter. Devise ways of attracting attention to your location from the air. For this, it is best to move to an open area, a clearing or above the tree line.

Lay out colourful items such as tents or garbage bags or light a smoky fire to attract attention. Foot patrols may also search for you. They may make three blasts of sound in sequence (shouts or whistles) and you can too to attract their attention. Three flashes of light in sequence can be used at night. This sequence of three is for emergencies only and should not be misused.

If there is an accident

Apply relevant first aid. Assess the situation taking into consideration the seriousness of the injury or illness, the urgency and availability of external assistance and the resources of the group. If it is not wise to proceed and no contact can be made to the police by phone, a competent subgroup should be sent for the nearest help with information about the nature of the injury or illness and a detailed description of the location of the group.

ACTIVITY 1

WHAT WOULD YOU DO?

Time: 30 minutes
Equipment: None
Preparation: Read information

Discuss each of the above scenarios in detail. Imagine these are real. Think carefully about what you would do. Who would you send for help? Who would stay and look after the patient/s? What have you packed that would assist you.
Before You Leave

- Make sure you have logged your trip plans and intentions with the relevant authorities such as police and park rangers. Also let some people at home know your plans. You should let them know who is travelling, where you intend to go and times of when you are leaving and expect to return. It is always a good idea to let everyone know you have returned safely at the end of your trip. There is an example of a Trip Intentions sheet you could use to notify people of your expedition on the following page.

- Check the environmental conditions as close to departure as possible. This includes weather, track conditions, availability of water and river levels and fire danger. This may involve calling the relevant authority to get the latest information as close to the day you leave as possible.

- Complete a Route Plan of each day including a rough timeline, major rest stops, distance to be walked. Leave a copy of this behind with your contact person. This person has should also have all the contact and emergency details of party members.

- Think about who should lead each day and some songs, games or activities you could use.

- Recheck you have everything off the packing list you need.

More Information

There are various sources that will provide you further, more detailed and advanced information on lightweight camping and hiking.

Books

- Check out books at your Hall, house and at the library.

People

- Ask a Girl Guide Leader or other knowledgeable individuals such as family friends
- Contact organisations such as Orienteering Australia (http://www.orienteering.asn.au)
- Visit Outdoor stores and speak to their staff. Some stores you could visit are Kathmandu, Snowgum, Mountain Design, Paddy Pallin and Anaconda.
- School outdoor teachers

Websites

Be careful what information you get off the internet. Websites are not controlled and monitored. It’s a good idea to double check the information you get with another source or check with someone else.

Useful websites include:

- Department of Sustainability and Environment (Victoria) http://www.dse.vic.gov.au/
- Bushwalking Australia http://www.bushwalkingaustralia.org/

There are also many websites devoted to hiking in individual States and Territories.
Trip Intentions

Fill this form out before you leave home and leave it with someone reliable. Attach a copy of your Route Plan. Don't forget to notify the contact person on return or if delayed.

Your Name
Your Position (Eg: LiC, youth organising)
Your Mobile

<table>
<thead>
<tr>
<th>Name</th>
<th>Youth / Adult</th>
<th>Emergency Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vehicles left at (location)
Vehicle Registration Numbers

The Group is carrying:

- [ ] Waterproof Jackets
- [ ] First Aid kits
- [ ] Whistles
- [ ] Sleeping bags
- [ ] Spare clothing
- [ ] Emergency Kits
- [ ] Maps and Compasses
- [ ] Mobile phones
- [ ] Food for ______ days
- [ ] Matches
- [ ] Tent or emergency shelter

If we have not returned by _______ am/pm on ________ (date), ring the Police.
The Duke of Edinburgh Award

The Duke of Edinburgh is an award based on individual challenge designed to encourage young people to develop into mature, active citizens who will positively contribute towards society. It is an International award. Its program of voluntary activities encourages personal discovery and growth, self-reliance, perseverance, leadership, responsibility and service to the community. It is available to those 14 – 25 years old.

There are three levels of the award, each with an increasing degree of commitment. To gain any one of the levels, participants must complete four sections: Physical Recreation, Skills, Service and Adventurous Journey. For Gold level, you must also complete a Residential Project. Within these sections, participants design their own program by setting goals in areas that interest them. Lightweight hiking is an activity you can use to complete the Adventurous Journeys required at any level.

In some states, you can achieve your Duke of Edinburgh Award through Girl Guides. Contact your State office to check if they can help you to get started on your award! Alternatively, you could contact The Duke of Edinburgh’s Award Website: www.dukeofed.org.au.

<table>
<thead>
<tr>
<th>Level</th>
<th>Age Group</th>
<th>Physical Recreation</th>
<th>Adventurous Journey</th>
<th>Residential Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronze</td>
<td>14+ Years</td>
<td>3 months</td>
<td>3 days/night</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Averaging at least one hour a week. Additional three months for one of service, skill or physical recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>15+ Years</td>
<td>6 months</td>
<td>3 days/night</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Averaging at least one hour a week. Direct entrants require an additional six months for one of service, skill or physical recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>16+ Years</td>
<td>12 months</td>
<td>4 days/night</td>
<td>5 days/night</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Averaging at least one hour a week. Direct entrants require an additional six months for one of service, skill or physical recreation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“I lightweight hiked as part of my Duke of Ed Award. I found that undertaking my Duke of Ed Award widened my friendship group whilst broadening my skills.”
- Rosie

Try Camping Trefoil 3
**Suggested Programs**

Following is a range of programs of differing lengths using the activities in this booklet.
Design your program to suit the needs of your group.

### 5 Day Program

These are suggested activities. There is a need to read through the information on the relevant section first and discuss if desired. It is suggested participants practise cooking on Trangias or similar throughout the camp.

<table>
<thead>
<tr>
<th>Day</th>
<th>Morning</th>
<th>Afternoon</th>
<th>Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrive</td>
<td><strong>Cooking Equipment</strong>&lt;br&gt;1: Boiling Water (15 min)&lt;br&gt;2: Trangia Practice&lt;br&gt;– 2 min noodles (1-2 hours)&lt;br&gt;3: Trangia Cleaning Kit (10 min)&lt;br&gt;<strong>Water</strong>&lt;br&gt;1: Water Sanitation (15 min)</td>
<td><strong>Food and Shopping</strong>&lt;br&gt;2: Milk Taste Test (10 min)&lt;br&gt;3: Food Packaging Choices (30-40 min)&lt;br&gt;5: Food Discussion Topics (15 min)</td>
</tr>
<tr>
<td>2</td>
<td><strong>First Aid</strong>&lt;br&gt;1: First Aid Kit Check (5 min)&lt;br&gt;2: What is...? (25 min)&lt;br&gt;<strong>Emergency Kit</strong>&lt;br&gt;1: Tiny but useful (15 min)&lt;br&gt;<strong>Hygiene and Toilets</strong>&lt;br&gt;1: Hygiene Tips (15 min)&lt;br&gt;2: Practice Dig (20 min)</td>
<td><strong>Clothing</strong>&lt;br&gt;1: Raincoat Test (5 min)&lt;br&gt;2: Weather Relay (25 min)&lt;br&gt;<strong>Equipment</strong>&lt;br&gt;1: Waterproofing Practice (10 min)&lt;br&gt;4: Equipment Wish List (25 min)&lt;br&gt;<strong>Packing</strong>&lt;br&gt;1: Essentials Only (25 min)&lt;br&gt;2: Practise Packing (30 min)</td>
<td><strong>Water</strong>&lt;br&gt;3: Think Twice (5 min)&lt;br&gt;<strong>Menu Planning</strong>&lt;br&gt;1: Dream up a Menu (15 min)&lt;br&gt;2: Menu Revision (15 min)&lt;br&gt;3: Nutrition Evaluation (15 min)</td>
</tr>
<tr>
<td>3</td>
<td><strong>Map Reading</strong>&lt;br&gt;1: Plan it out (20-30 min)&lt;br&gt;2: Route Plan (20-30 min)&lt;br&gt;<strong>Maps</strong>&lt;br&gt;1: Map Comparison (10 min)</td>
<td><strong>Food and Shopping</strong>&lt;br&gt;1: Supermarket Challenge (45-60 min)&lt;br&gt;Allow time to travel to and from Supermarket</td>
<td><strong>Group Management</strong>&lt;br&gt;1: Time Fillers (10 min)&lt;br&gt;<strong>What to do When...</strong>&lt;br&gt;1: What would you do? (30 min)</td>
</tr>
<tr>
<td>4</td>
<td>Day Hike</td>
<td>Day Hike</td>
<td>Debrief and Relax</td>
</tr>
<tr>
<td>5</td>
<td>Talk about Lessons Learnt&lt;br&gt;Discuss where to from here</td>
<td>Home</td>
<td>-</td>
</tr>
</tbody>
</table>
# 3 Day Program

These are suggested activities. There is a need to read through the information on the relevant section first and discuss if desired.

<table>
<thead>
<tr>
<th>Day</th>
<th>Morning</th>
<th>Afternoon</th>
<th>Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1 (Friday)</strong></td>
<td>-</td>
<td>Travel</td>
<td><strong>Food and Shopping</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Milk Taste Test (10 min)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Food Packaging Choices (30-40 min)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Food Discussion Topics (15 min)</td>
</tr>
<tr>
<td></td>
<td><strong>Menu Planning</strong></td>
<td></td>
<td><strong>Menu Planning</strong></td>
</tr>
<tr>
<td></td>
<td>1. Dream up a Menu (15 min)</td>
<td></td>
<td>1. Dream up a Menu (15 min)</td>
</tr>
<tr>
<td></td>
<td>2. Menu Revision (15 min)</td>
<td></td>
<td>2. Menu Revision (15 min)</td>
</tr>
<tr>
<td><strong>Day 2 (Saturday)</strong></td>
<td><strong>First Aid</strong></td>
<td><strong>Clothing</strong></td>
<td><strong>Water</strong></td>
</tr>
<tr>
<td></td>
<td>1. First Aid Kit Check (5 min)</td>
<td>1. Raincoat Test (5 min)</td>
<td>1. Water Sanitation (15 min)</td>
</tr>
<tr>
<td></td>
<td>2. What is...? (25 min)</td>
<td>2. Weather Relay (25 min)</td>
<td>3. Think Twice (5 min)</td>
</tr>
<tr>
<td></td>
<td><strong>Hygiene and Toilets</strong></td>
<td><strong>Cooking Equipment</strong></td>
<td><strong>Equipment</strong></td>
</tr>
<tr>
<td></td>
<td>1. Hygiene Tips (15 min)</td>
<td>1. Boiling Water (15 min)</td>
<td>1. Waterproofing Practice (10 min)</td>
</tr>
<tr>
<td></td>
<td><strong>Map Reading</strong></td>
<td>2. Trangia Practice – 2 min noodles (1-2 hours)</td>
<td>2. Equipment Wish List (25 min)</td>
</tr>
<tr>
<td></td>
<td>1. Plan it out (20-30 min)</td>
<td>3. Trangia Cleaning Kit (10 min)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>What to do When...</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. What would you do? (30 min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Day 3 (Sunday)</strong></td>
<td><strong>Packing</strong></td>
<td><strong>Travel Home</strong></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1. Essentials Only (25 min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Practise Packing (30 min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Easy Access (5 min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Rearrange (30 min) – if time</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Group Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Time Fillers (10 min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Talk about Lessons Learnt Discuss where to from here</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Lightweight Camping and Hiking Page 31*
1 Day Program

These are suggested activities. There is a need to read through the information on the relevant section first and discuss if desired.

This day is planned to run from 10:00am to 4:00pm.

**First Aid**
1. First Aid Kit Check (5 min)
2. What if...? (25 min)

**Water**
1. Water Sanitation (15 min)
3. Think Twice (5 min)

**Food and Shopping**
2. Milk Taste Test (10 min)
3. Food Packaging Choices (30-40 min)
5. Food Discussion Topics (15 min)

**Cook Equipment**
2. Trangia Practice (1-2 hours). Cook Lunch.
4. Trangia Cleaning Kit (10 mins)

**Equipment**
1. Waterproofing Practice (10 min)

**Clothing**
2. Weather Relay (15 min)

**Packing**
1. Essentials Only (25 min)

1.5 Hour Programs

These are suggested activities. There is a need to read through the information on the relevant section first and discuss if desired.

These programs can be run independently or altogether as a set.

**1. Trangias**

Cooking Equipment
2. Trangia Practice (1-2 hours)
4. Trangia Cleaning Kit (10 min)

**2. Equipment and Packing**

Equipment
1. Waterproofing Practice (10 min)
4. Equipment Wish list (20 min)

**3. Food and Shopping and Menu Planning**

Food and Shopping
2. Milk Taste Test (10 min)
3. Food Packaging Choices (30-40 min)
5. Food Discussion Topics (15 min)

Menu Planning
1. Dream up a Menu (15 min)
2. Menu Revision (15 min)

**4. Maps and Map Reading**

Maps
1. Map Comparison (10 min)

Map Reading
1. Plan it out (20-30 min)
2. Route Plan (20-30 min)

**5. Health and Safety**

First Aid
1. First Aid Kit Check (15 min)
2. What if...? (25 min)

Emergency
2. Tiny but Useful (15 min)

What to do When...
2. What would you do? (30 min)

Final Comments

Remember why you are lightweight camping or hiking. Whether it be for fitness, enjoyment, challenge or friendship make sure you keep your objective in mind and make time to achieve it.

Know your limitations. Whilst it is always good to challenge ourselves, it can be no fun if we over stretch our limitations, especially in regards to physical ability.

Over time, not only will you collect lightweight camping equipment and clothing but your knowledge will expand. You will be able to more accurately guess the quantities of food to take and practise at map reading will allow you to visualise the terrain from contours on a map. There are activities you can do to prepare yourself at home but getting out and about is the best way to learn.

Make sure you take an adult who is competent and comfortable with lightweight camping. They should have their first aid qualification as well.
No electronic devises are substitutes for map reading and navigation skills. They are essential, especially if you become lost. As you walk, pay attention to geographical features, the terrain and regularly identify your position on the map.

**Answers**

Here are the answers and some further discussion topics to the activities found in the resource kit:

**Food and Shopping**

**Activity 5 - Food Discussion Topics:**

It is better to pack less food so that your pack is light. False - you don't need to restrict too severely the food you take. You want to enjoy your meals.

It is ok to eat chocolate at every meal. **True**, as long as you are eating other items to maintain a balanced diet.

It is not possible to take meat hiking. **False**.

Wraps or flat bread and nutella are a good lunch because it is low GI and is a good source of energy and carbohydrates. **False**.

Powdered milk is an ok substitute for fresh milk. **True**.

It is better to eat a regular muesli bar than a natural nut bar when hiking because it has more sugar. **False**.

It is ok to substitute dry fruit for fresh fruit. **False**.

Surprise peas can fix most meals. **True**.

Easy Mac is a good, quick and easy meal for my Patrol's dinner. **False**.

Eating tins of baked beans whilst hiking for most meals is a good idea. **False**.

It is not necessary to take a Trangia hiking. **True**.

You have to eat meat at every meal to get sufficient protein. **False**.

Eating an apple and an Up & Go for breakfast is sufficient. **True**.

**Water**

**Activity 3 – Think Twice:** The amount of water one person requires whilst lightweight camping and hiking varies greatly. You will need at least 2 litres of water to drink and what you require for cooking and cleaning. Different foods require different amounts of water to cook. To use less water, choose your foods carefully. Do not compromise the amount of water you have to drink. With no running water at your campsite, you will need to carry in all you need. Make sure you find out whether or not your campsite has running water before you leave home.

**Maps**

**Activity 1 – Map Comparison:** A tourist map that follows mapping conventions such as oriented north, legend and scales can be detailed and provide good information about walks and campsites. They can be more appealing visually, however they do not provide the detail and accuracy required for hiking. Whilst topographic maps are harder to come across, it is important to make this extra effort. There maps provide you with more information about the nature of the environment you are in. Take and use a topographic map with you.

**Packing your Bag**

**Activity 2 – Easy Access:** some items you may wish to keep at the top of your pack include waterproofs, food, first aid kit and toilet paper.

**Campsite Layout**

**Activity 1 – Where to camp?**

There are two possible areas to camp, one to the west of the Blue camping group, the other to the south west. Each has their own advantages and disadvantages. It is a matter of personal preference as long as you are not too close to the river or any trees.

**Activity 2 – Did they choose well?**

The Group have camped too close to the river. They need to move their tents further away from the river. Otherwise, they have set up camp well.

**Acknowledgements**

First of all, our thanks goes to the Taking the Lead 2009 facilitators and organisers for encouraging us to begin this project in the first place. Without their inspiration, wisdom and encouragement we would not have been able to produce this resource kit.

We would like to thank Jacqui Kiss for helping us brainstorm activity ideas.

Thanks also to Vicki Cameron, Helen Reid and Kerry Cardwell who read over the kit for us.

Karen Chatto and Bev Neilson assisted us to get this kit published at a National Level. Thanks very much!

Lastly, thanks to all our family and friends for their ongoing support and encouragement to get this kit off the ground and of our never ending adventures and dreams.