

Clothing

Worn while walking

- Shorts or long trousers (not jeans made of cotton)
- Shirt (long sleeved)
- Sandshoes or boots
- Socks
- Gaiters
- Hat (wide brimmed)

In your pack

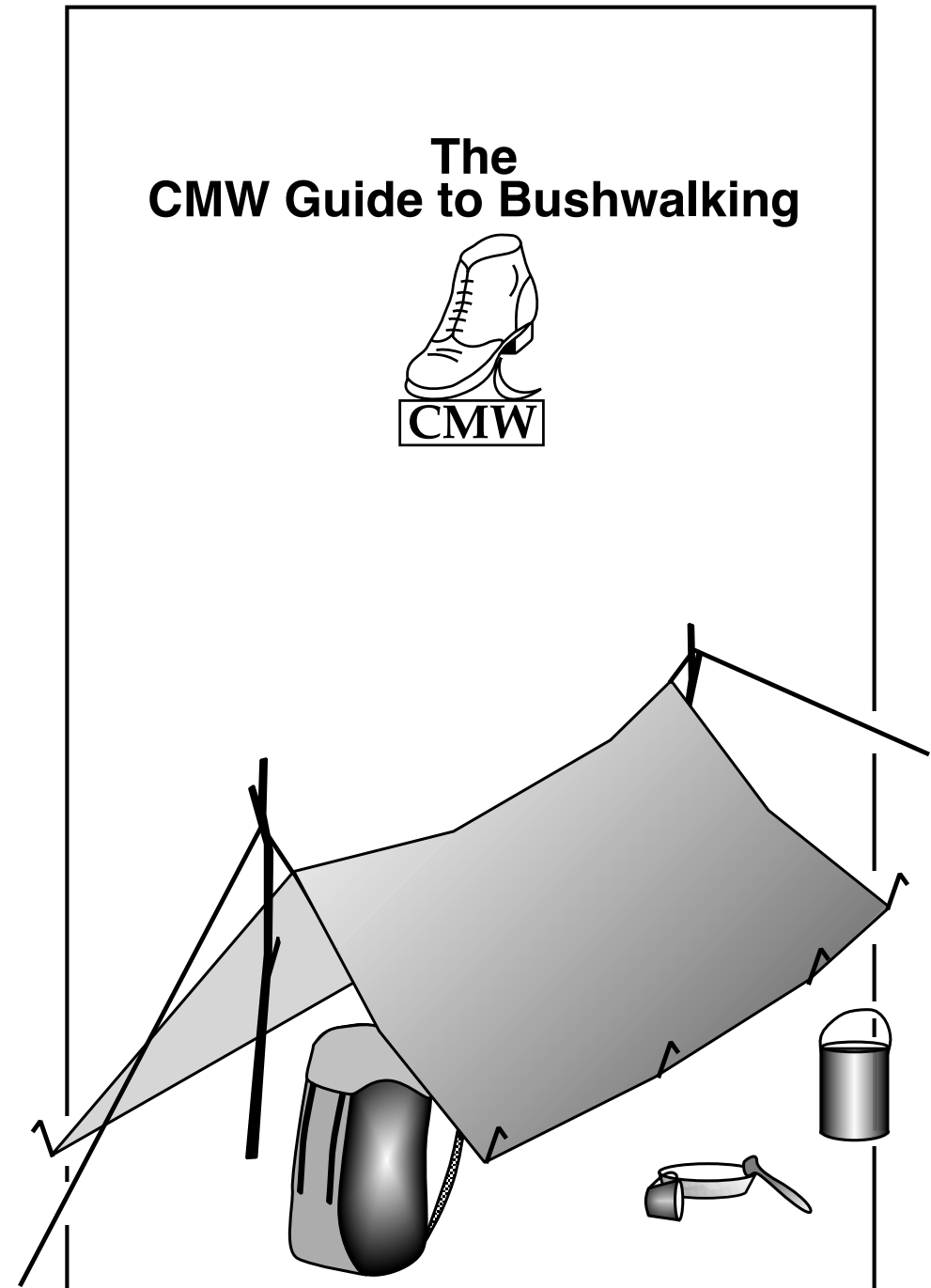
- Parka
- Thermal jacket/jumper
- Thermal underwear
- Socks
- Sunglasses and case (if the walk is in the Snowy Mountains)

Toiletries

- Toilet paper
- Lip sunscreen
- Sun cream
- Soap
- Face towel or Chux towelette (not a towel—it's too heavy)
- Toothbrush
- Toothpaste
- Dental floss
- Mosquito repellent

If it's not on this list, do you really need it?

For a weekend walk your fully laden pack should weigh between 9 and 11 kg.



Welcome to the CMW

The Coast and Mountain Walkers of NSW is really just a group of people who love the bush. Each weekend, we go in small groups to visit a few of the thousands of beautiful peaks and rivers in the Sydney region.

Bushwalking is a means to many ends—to enjoy wildflowers, to spot birds and animals, to camp in majestic places, to paint, to take photographs, to read good books by babbling brooks.

We have produced this booklet to:

- Explain the technicalities of going on a club walk.
- Give a few tips about equipment and food needed on a typical walk.
- Point out the rules of responsible bushwalking.

Checklist

This checklist includes the things you need on a typical walk. It does not include anything specialised, such as mittens or an air mattress, that are required on some walks. Always check with the leader whether you need any special equipment.

General

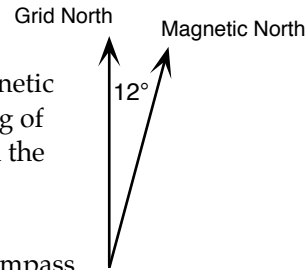
- Pack
- Pack liner (garbage bag)
- Sleeping bag
- Sleeping bag liner (obligatory with club bags)
- Tent or fly, pegs and poles
- Ground sheet if you have a fly (a plastic sheet 1 m by 2 m)
- Sleeping mat or 'Thermarest'
- Stove (if fires are not permitted on the walk)
- Billy
- Cup (plastic)
- Cutlery (plastic spoon and fork, small metal knife)
- Water bottle (at least 1 litre)
- First-aid kit
- Map(s)
- Compass
- Torch
- Matches and fire starters in waterproof container
- Two or three plastic bags (to store wet/dirty clothing and to carry out rubbish)

Grid north versus magnetic north

As mentioned earlier, there is a small difference between magnetic north and grid north. If you need maximum accuracy, you align the alignment arrow with magnetic north rather than grid north. The difference between the two 'norths' is given on each map because it varies from region to region—for the Blue Mountains, magnetic north is typically 12° east of grid north.

Thus, when working from map to compass, first set your compass using grid north, and then rotate the dial towards magnetic north. In the example, the reading of 292° would be reduced to 280° in the Blue Mountains.

Conversely, when working from compass to map, first set your compass using magnetic north, and then rotate the dial *towards* grid north. In the example, the reading of 220° would be increased to 232° in the Blue Mountains.



Practise!

By now you are probably totally confused. But don't worry—instead, take this booklet, your compass and the appropriate map on your next walk.

Going on a walk

Don't worry if you haven't done any bushwalking before. There are no special requirements, except perhaps a sense of humour.

If you are new to bushwalking, take care to choose a walk that is appropriate to your level of fitness and experience. Although you may feel you are very fit—perhaps you even run marathons—fitness alone is no substitute for the numerous skills of an experienced bushwalker. It is far better to go on a walk that you find easy, than on one that is an ordeal.

The best approach is to attend the club meetings and talk to the committee members and the leaders. This allows us to suggest suitable walks and to help make your first bushwalks enjoyable.

Understanding the walks program

We publish our magazine, *Into The Blue*, four times each year. At the back of each issue is our walks program which, for each weekend, typically lists two or more overnight walks and a day walk.

Each walk includes a brief description and the following technical details:

- **Distance and Grade.** These give a guide to the difficulty of the walk; they are described below in more detail.
- **Maps.** These are the maps that cover the walk.
- **Transport.** We share transport as much as possible—this is not only cheaper, it is also much more sociable. The figure is the amount each passenger gives to the driver to help pay for petrol, wear and tear.
- **Leader.** The person who has volunteered to lead the walk (everything we do is voluntary).

Distance and grade

Distance is the approximate distance you have to walk each day (it also takes into account the amount you have to climb and descend). The values are: *short* (under 10 km), *medium* (10 to 20 km) and *long* (over 20 km).

Grade is the type of terrain over which you have to walk.

The values are:

- **Easy.** Good tracks or open terrain.
- **Medium.** Bush tracks or fairly easy terrain.
- **Rough.** Thick scrub, some scrambling and walking along creeks.
- **Exploratory.** The leader is not familiar with the area—so expect rough terrain.

- **Abseiling.** Descending over cliffs by rope.

- **Canyoning.** Swimming or liloing through the canyons.

The water is very cold, even in mid summer, and wetsuits may be recommended.

Unfortunately, although these terms will eventually become

meaningful, they are very hard to interpret if you have not

done much bushwalking. The wisest approach is to start

with short/easy walks and to talk to as many club members

as possible.

Making arrangements

Before going on a walk, you must talk to the leader—

generally, no later than four days before the walk. Ideally,

you should talk personally to the leader at the preceding

meeting. (If the leader is not there, talk to a committee

member.)

Both you and the leader need to establish your suitability

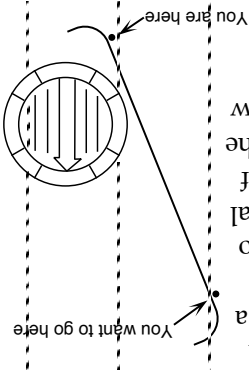
for the walk. Obviously, if you are new to the club, both of

you will tend to be apprehensive.

Map to compass

When going from map to compass, you place your compass on the map so that a long side of the base is parallel to the line which joins your present position to your destination. You then rotate the dial until the alignment arrow on the base of the dial points north and is parallel to the vertical 'grid' lines. Your compass is now calibrated and ready for use (for the moment, we will ignore the difference between *magnetic* north and *grid*

north).



Using the map, if you are at 'A' and want to go to 'B', align your compass base along the line 'A to B' and rotate the dial until the alignment arrow is parallel to the vertical grid lines—your compass is now calibrated (it should read 292°).

Before you start walking, you simply rotate the whole

compass until the alignment arrow and the magnetic needle

are parallel. The bearing arrow, at the front of your

compass, now points towards your destination.

Compass to map

When going from compass to map, the

procedure is essentially the reverse of

the above. Assume you are on a small

peak and can see 'Mount Big Al'

towering above you. So, you point the

bearing arrow at 'Mt Big Al' and then

rotate the dial until the alignment arrow

and the needle are parallel (assume it is

220°). Next, place your compass on the

map so that one side touches 'Mount Big

Al' and rotate the whole compass until

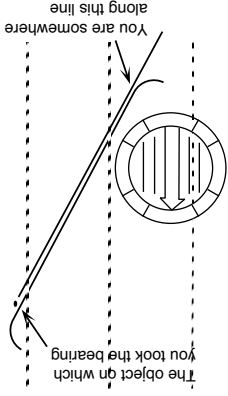
the alignment arrow is parallel to the

vertical grid lines. You are somewhere along the side of

your compass touching 'Mount Big Al'. If you have done

this correctly, you are on peak 'D'; if you haven't, you're lost

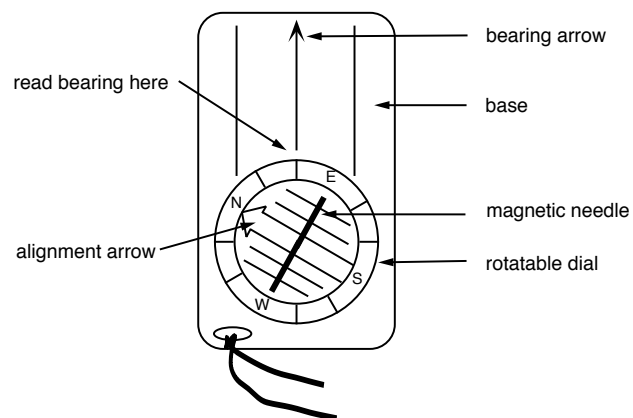
like the rest of the party.



Compass

We now come to that nifty little device, the compass. By sheer good luck the earth has a magnetic field whose axis just happens to be closely aligned to the geographical axis. Because a compass needle aligns itself along the magnetic axis (the high school physics again) it also points roughly north/south. This enables us to align a map with the real world—so, when it's foggy, damp and cold, and you want to find your way back to the car, you will really appreciate the existence of a north pointing magnetic field.

A compass of the type shown below is the best for bushwalking. It has a clear plastic base in which is mounted a rotatable dial. The magnetic needle, housed within the dial, rotates freely and therefore always points north/south (the *north* end of the needle is normally painted red).



Using them together

There are two ways of using a map and compass together:

- Transferring a bearing from map to compass—you do this when you know where you are, but want to know the direction in which you must walk.
- Transferring a bearing from compass to map—you do this when you are trying to find your exact position.

Going to and from a walk

The leader usually arranges transport on the Thursday before the walk. The party members usually leave Sydney very early on the Saturday morning, or on the Friday evening.

Sydney being the size it is, the drive typically takes between two and four hours.

Because eating is a major obsession with bushwalkers, we often stop for a coffee or meal on both inward and outward journeys.

It is also a good idea to take along a clean set of clothes for the return journey because you may arrive back at the car sopping wet from sweat or rain.

Being overdue

Sounds ominous! Fortunately, accidents are quite rare—bushwalking is far safer than crossing a Sydney street or braving an after-Christmas sale.

The most common reason for being late is localised flooding. For example, you may be stuck on the wrong side of a rising creek, or the bush track leading back to civilisation may be impassible.

Please remember to tell your relatives and friends not to worry if you are late. If you are delayed, you will generally be able to make contact the next morning. And remember to show them the instructions and phone numbers that appear at the start of every walks program.

Taking the right gear

Taking the right gear, and taking just enough of it, is one of the fine arts of bushwalking. The difference between appropriate and inappropriate gear is the difference between pleasure and pain.

Here we provide some tips for major items, such as clothing, footwear and packs. A checklist at the back of this booklet lists everything you need on a typical weekend walk.

We have a range of quality gear for hire at very cheap rates.

We recommend that you hire before you buy—only after you have used quality gear and talked to other club members will you know what is appropriate to your needs.

Clothing

Your clothing requirements vary greatly with the seasons, and with the areas in which you walk. In summer, you wear clothing to protect you from the sun (and insects at night). In winter, you need to keep warm.

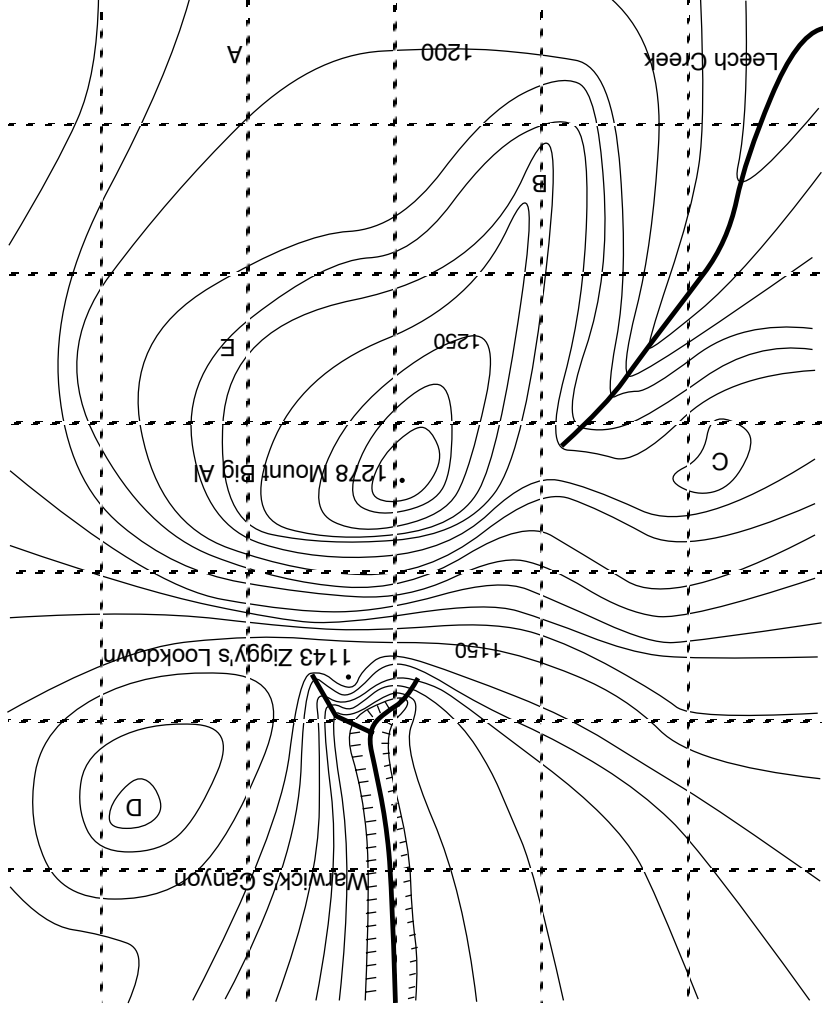
While walking

Around Sydney, it never gets very cold; even in winter, you tend to keep fairly warm while walking. Consequently, the well dressed bushwalker typically wears:

- Shorts or lightweight trousers (according to preference)
- Shirt (long sleeved polycotton)
- Sandshoes and woollen socks
- Gaiters (to protect your shins from scratches)
- Hat (wide brimmed)
- Light thermal vest during winter

This covers the four basic concepts of map reading:

- The scale of the map determines the extent to which the countryside is compressed onto the map.
- The top of the map points north.
- Contour lines represent ground of equal height. Therefore peaks are surrounded by concentric lines; and the closer the lines, the steeper the slope.
- Rivers and creeks cut across the contour lines.



A typical map

Contour lines

Contour lines, shown in brown, indicate ground of equal height. Thus if you follow a contour line you neither climb nor descend. You only climb or descend if you *cut across* these lines.

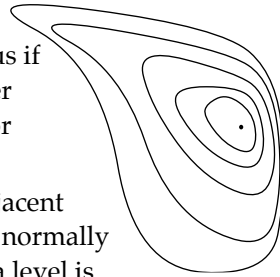
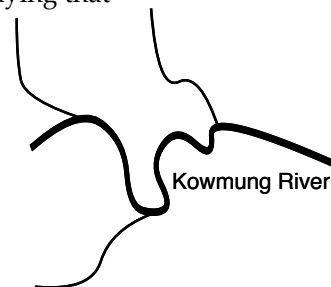
The difference in height between adjacent lines—called the *contour interval*—is normally 10 metres. Also, the height above sea level is printed along some of the lines.

Since you only climb if you cut across contour lines, it follows that a peak is represented by one or more concentric contour lines—because you climb up to a peak (cut across contour lines) from every direction. In the map shown on the next page, the highest peak is 'Mount Big Al'. The points marked 'C' and 'D' are also peaks; but only small local ones, because they are separated from the surrounding countryside by fewer lines.

Another feature you can derive from contour lines is that of steepness. Since distance on the ground is proportional to the distance on the map it follows that the more contour lines you cross in a given space the steeper the slope. If you look at the map you will see that it is about the same distance from Mount Big Al to Ziggy's Lookdown as it is from Mount Big Al to 'E'; but in the first case you drop 135 metres (cross 13 contour lines), whereas in the second you drop only 40 metres (cross four contour lines).

Rivers

Rivers and creeks, shown in blue, cut across the contour lines—this is another way of saying that water flows downhill (hopefully you remember this bit of high school physics). From this it follows that the valleys follow the blue lines.



Spare clothing

Because you may get saturated while walking, you must carry suitable rain gear and spare clothing:

- Waterproof parka
- Thermal jacket/jumper
- Thermal vest and long johns (these are light-weight, and keep you warm even when damp)
- Socks

Footwear

Probably the greatest source of discomfort for bushwalkers is footwear. There is no ideal shoe; and no two feet—even your own—are alike.

Many bushwalkers in Sydney wear sandals or running shoes, in particular *Dunlop Volleys*. These are generally the most suitable for the types of walks we do near Sydney.

If you want to wear boots, buy only quality ones (as stocked in bushwalking shops) and choose them very carefully. *And break them in before going on any walk.*

Pack

A typical pack has an internal frame and a waist-belt that places most of the weight on your hips. There are some important factors to consider when choosing a pack:

- **Pack length.** The majority of packs are designed for males of average height or taller—if you fall into this category, you will have a wide choice. If you are shorter than about 170 cm, you have to choose your pack carefully and make sure that its length (from the shoulder straps to the waist-belt) is right for you.
- **Pack capacity.** The initial inclination of many people is to choose a large pack—but this is often an unwise move. With a bit of experience you can learn how to pack efficiently and to carry the minimum needed for comfort and safety.

As a general rule, a pack with a capacity of 65 litres is adequate for even the longest walk.

- **Pack weight.** Choose a pack that is as light as possible—certainly less than 2 kg. In practice this means a pack that has a simple design, and does not have lots of extra straps.

- **Single compartment.** Choose a single compartment pack rather than a dual compartment one. (Dual compartment packs are heavier, harder to waterproof, and harder to pack efficiently.)

Sleeping bag

Unfortunately, choosing a sleeping bag is more difficult than choosing a pack because of the wide range of temperatures that you may find and yourself subjected to.

Most experienced walkers have two bags: a light one for non-winter trips (often called a 'three season' bag) and a heavier ('four season') one for winter trips. We recommend that you buy a three season one first, unless you want to go on a snow or winter trip..

All good sleeping bags are made from 'superdown' (very fine duck feathers), and come in standard and long sizes.

Tent

Campfire discussion about the 'right' tent is often a heated affair. Just cast your eye around any campsite to see the almost limitless variety of tents that are available.

Ironically, the cheapest solution is a simple 'fly'—like the one shown on the front cover of this guide—is quite adequate for most of our walks. Also, a fly costs much less than a good tent, and is about half the weight.

It is only on trips to places like the Snowy Mountains that a tent is essential. If you do decide to buy a tent, first talk to club members and look at their tents.

Stove

Most club members use stoves, in preference to cooking on a campfire—the benefits of a stove are particularly obvious when it's cold and wet.

Using map and compass

When in the bush everything can look so confusing. It is then that you appreciate that most useful partnership: map and compass. Here we explain the basic concepts of a map, the workings of a compass and, lastly, how to use them together.

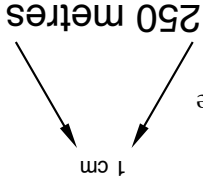
Map

A map is essentially a bird's eye view of the countryside. If you were to fly over the Blue Mountains you would easily recognise the similarity between the ground directly below you and the corresponding map.

There are four basic concepts you need to understand about maps: scale, orientation, contour lines and rivers.

Scale

The maps we normally use have a *scale* of 1:25000. This means that 250 metres on the ground is squeezed into 1 centimetre on the map. These maps contain a lot of information and are equivalent to flying low over the countryside. Country road-

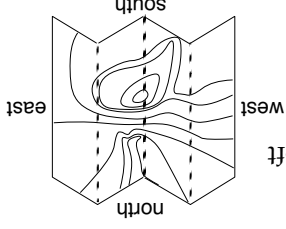


maps, on the other hand, are equivalent to flying very high—they therefore don't show enough detail for walking.

Most maps have a grid, made up of vertical and horizontal lines, that divide the map into blocks. On a 1:25000 map, each block represents one square kilometre. As is explained later, the grid is essential when you use a map with your compass.

Orientation

The top of the map always points north; from this it follows that the left side points west, the right side points east and the bottom points south.



Farmland

We rely on the friendliness of many farmers. Comply with their requests because a careless act on your part could prove extremely expensive to a farmer. In particular, when crossing farmland, leave gates as you find them.

Keeping together

It is essential that you keep in contact with the rest of the party at all times.

Obviously, the best solution is to pay attention to where the other party members are going. And always make others aware of what you are doing—for example, if you stop to relieve yourself, tell someone else first.

It is difficult to give precise instructions as to what to do if you ever become separated—other than don't panic—but keep these tips in mind:

- As soon as you think that you have lost the party, shout out. It is far better to shout too often than not to shout enough.
- If you have no idea of where the others are, stay where you are; the others will soon come back.
- Don't start racing to 'catch up'. You may actually be running away from the party.
- If you have been following a track or creek, you may have taken a wrong turning. If you remember seeing a junction, return to that junction; but no further.

The moral is keep in touch with the others at all times; and learn how to navigate.

There are many types of stove, each with its own advantages and disadvantages. The two most popular types of stove are:

- **'Trangia'**. A Trangia stove is very easy and safe to use, and runs on methylated spirits. Trangia stoves come as a complete kit with pots, pot gripper and a built-in windshield. They also come in two sizes; the smaller size being suitable for one person.

If you purchase a Trangia, you can reduce the weight significantly by taking only one pot, and replacing the heavy lid with thick aluminium foil (as sold in supermarkets for baking meat).

- **Gas**. A gas stove is lighter than a Trangia, but you must separately purchase the burner, pot(s), pot gripper and windshield (thick aluminium foil).

A disadvantage of gas stove is that you sometimes end up carrying a full gas canister on a walk, but only use a fraction of the gas. Savvy walkers keep a collection of partly used gas canisters and accurately measure their weights, so that, for each walk, they can select the canister that contains just enough gas.

On some walks you must use a stove—typically because you will be camping in an environmentally fragile or popular area. If you are unfamiliar with a walk, ask the leader whether you need a stove.

First-aid kit

Hopefully, you will never need a first-aid kit, but you must always take one on a walk. Your kit should contain:

- Aspirin/paracetamol
- Elasticised bandage
- Dressing
- Triangular bandage
- Elastoplast bandaid strip
- Adhesive tape/bandage
- Antiseptic
- Safety pins
- Scissors

- Tweezers
- Needles
- Thread, thin and thick
- Matches, spare
- Note paper
- Pencil

Pack these items in a suitable waterproof container—altogether, your first-aid kit should weigh less than 300 gm.

Miscellaneous tips

Apart from the major items and food, you also need to carry other things, such as toiletries and cooking gear. The trick is to take only those things that are essential, and only the amounts you need.

Here are a few tips:

- Take only small quantities—for example take an almost empty tube of toothpaste, an almost finished roll of toilet paper and a small piece of soap.
- Transfer things such as butter and honey (and face cream), to small plastic containers.
- Take an aluminium, not an stainless steel, pot for cooking.
- Take a plastic, not an aluminium water bottle. The cheapest—and perhaps the best—water bottle is a simple 1.25 litre fizzy drink container.
- Take plastic, not metal, spoon and fork—camping shops sell light, unbreakable plastic cutlery.
- Take a light, simple steel knife; not a heavy, fancy one that has a built-in kitchen sink.
- Take a torch. (A headtorch is ideal, but talk to club members before buying one so that you get one that is appropriate to your needs.)
- Line your pack with a large plastic bag—such as a garbage bag—to keep everything dry. (Most packs are not very waterproof.)
- Don't carry any glass containers because they are heavy and fragile.

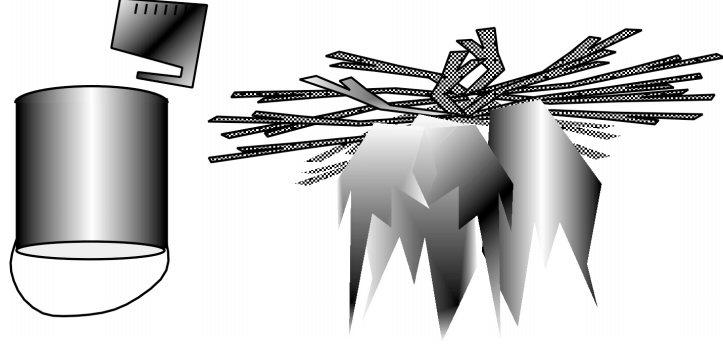
Fires

We are extremely fortunate in Australia to be able to have campfires in many of the places where we walk. So, if you light a fire:

- Observe any fire bans. (If a fire ban is likely, you should take food that does not require cooking.)
- Make sure that the fire is out before leaving it.
- Don't make the fire too big, especially if wood is scarce.
- If you use firewood stored in a hut, replace it before leaving—the huts and the firewood are the common property of all bushwalkers.

On some walks you must use a stove—typically

because you will be camping in an environmentally fragile or popular area. If you are unfamiliar with a walk, ask the leader whether you need a stove.



Tracks

Marked tracks, especially those in national parks, are designed to minimise erosion. So, if you are on a track, keep to it and don't take short cuts.

Bushwalking rules

Our guiding ethic is:

Our impact on the bush should be as small as possible—ideally, it should be impossible to discover where we have walked or camped.

Flora and fauna

All native flora and fauna are protected in national parks. For us, this rule applies wherever we walk.

Rubbish

You brought it in, so you take it out. Besides, empty plastic bags and tins weigh very little.

Don't burn anything, other than paper, on the campfire. Don't even burn paper-based packaging that is lined with aluminium or plastic.

Going to the toilet

Select a spot well away from the campsite, tracks and creeks.

If you are having a shit, dig a small hole with a stick or a rock (or even the heel of your shoe) and cover up after.

Washing

When washing with soap, fill a water bucket and wash well away from the creek, so that the water drains into the soil.

When swimming, swim downstream from the campsite.

- Don't take deodorants—everyone smells after a day's walking, so no-one is going to notice your body odour.
- Don't take a towel; a face towel or Chux towelette is quite adequate.

Packing it all in

Now that you've got gear and food scattered around your room, you have to pack it correctly—and neatly.

It's generally best to start by placing bulky items, such as your sleeping bag and spare clothing (but not your thermal jacket/jumper) at the bottom. The reason for this is that you won't need them until you have reached the campsite.

Here are a few more packing hints:

- Keep the denser things close to your back—this improves your balance. But make sure they don't dig into your back.
- Keep the weight on each side as even as possible—again, this improves your balance.
- Keep things you need often or quickly (such as your jacket or parka) as close to the top as possible. In the case of your parka, you may be able to put it in the top or back pocket.

Buying gear

When buying any bushwalking gear, only two words are important: *quality* and *appropriateness*.

Only buy quality, brand-name gear; there is a lot of cheaper gear in the shops, but, with a few exceptions, it is neither suitable nor comfortable.

Similarly, only buy equipment that is appropriate to your needs. Even good quality equipment is a waste of money if it doesn't fit—boots are a prime example—or if you don't need it for the types of walking you do—such as an expensive, heavy snow-tent on a walk to the Blue Mountains.

Taking the right food

Eating is one of the joys of life—and everything tastes so much better after a day's walk.

Keeping things light

Choosing the right types and quantities of food for a walk is another of the fine arts of bushwalking. Remember that you have to carry it; and if you take too much, you also have to carry it out.

Keep the following points in mind:

- Take only the amount you need. Think about what you normally eat for each meal. If, for example, you eat a cupful of muesli for breakfast, measure this amount into a plastic bag and take only that.
- Take fresh food in moderation; for example, an apple for each lunch. Although fresh food tastes better, it is 70% to 95% water.
- Take complex carbohydrates such as bread, rice and noodles—you need these to give you sustained energy.
- Avoid tins—again, they contain mostly water.
- Don't take packaged fruit juices because they are just flavoured water; and the water in our national parks tastes much better and doesn't contain preservatives or artificial flavours.
- Remove excessive packaging; for example, remove the outer packet of packet soups.

Food for a typical weekend walk

On a weekend walk you can eat more or less what you would eat at home.

The following list is intended simply as a guide. But whatever you bring, it should weigh between 2.0 and 2.5 kilograms (for two breakfasts, two lunches and one dinner). If you're very concerned about weight, take only dry food and don't take any tins—this will reduce the weight to less than 1.5 kg.

Breakfast

- Porridge or muesli
- Powdered milk

Lunch, snacks and miscellaneous items

- Sandwiches
- Nuts
- Dried fruits
- Fresh apple
- Tea/coffee
- Biscuits

Dinner

- Starter:
- Packet soup

Main meal:

- Fresh meat or small tin of meat/fish
- Fresh vegetables
- Rice or macaroni
- Spices/herbs

Dessert:

- Piece of fruit cake

Catering for long walks

Preparing varied and balanced meals that are light, yet tasty, requires skill and experience. Before you go on any of our longer walks, visit our website (www.cmw.asn.au) for recipe ideas and talk to other club members—some of us are quite good bush-cooks. On long walks we only take dehydrated food, which means that it only weighs about 800 gm per day.

We even have a dehydrator you can hire to dry your own vegetables and meats.

