

## Chapter 2

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# Camp Craft

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When pitching camp, as with all other activities during a hiking trip, one should try to disturb the environment as little as possible — this is the so-called minimum impact approach. Do not try to 'improve' a camp site by clearing vegetation; rather try to preserve its original splendour by maintaining it in its natural state.

As one climbs higher in the mountains, the soil and plant cover becomes ever sparser and the environment grows increasingly fragile. Burying rubbish, digging drainage ditches around tents, pulling out clumps of grass, and making fires all leave scars that take years to heal, if they ever do. Pollution around a poorly managed camp site can also destroy all life in a nearby mountain pool or stream. Those of us who visit the wilderness have a duty to ensure that we change or damage the environment as little as possible. This is the most basic rule of camping.

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## Choice of a camp site

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The basic requirements of a camp site are the availability of water and the provision of shelter against rain and wind. Of course, the ground should be as level as possible and relatively free from bumps, clumps of grass and rocks.

The leader's choice of a camping site should cater for the worst conditions conceivable. In particular, this means that the site should be well drained and safe from flash floods. Thunderstorms in South Africa typically cause rivers to come down in flood, and rain some distance from your camp site can cause the placid stream outside your tent door to change into a raging torrent within a short while.

In windy weather a forest provides the best shelter against the wind. In rainy weather, however, it is not advisable to pitch tents directly below trees — large drops form on the leaves, and these are more likely to soak through the sides of the tent. Never break branches when camping in a forest; just move them out of the way. Try not to damage even a single branch — trees are far too precious in our country.

In several areas in South Africa caves are found that are suitable for use as overnight spots. Never depend on a cave being available, though — the cave you have chosen may already be full when your group arrives. A cave can become extremely unpleasant in windy conditions if a 'wind tunnel' effect develops, and you can still be soaked inside a cave if the wind blows the rain in through the mouth of the cave. Despite these potential drawbacks, a cave is cosier than a tent because it allows the entire group to camp together and provides more room to move in if one is perhaps trapped for a few days by rain or snow.

In cold weather it is best to avoid low-lying areas, because cold air settles there during the night. Be on the lookout also for signs indicating the presence of animals, especially monkeys, cattle and crows, which can cause damage to tents, guyropes and food supplies. Be careful not to pitch tents in a spot which can become water-logged when it rains.

Especially if there are children in the party the site should be examined for potential dangers such as cliffs, beehives and rapidly flowing rivers, and all the members of the party should be warned of these dangers.

The danger posed by lightning should be borne in mind during 'the summer months. Try to avoid having

the tent as the highest object in the vicinity and do not pitch your tent under a solitary tall tree (see also Chapter 8, Mountain Hazards).

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## ***Pitching the tent***

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Even if the weather is excellent when the tents are being pitched, provision should be made for bad weather. Except in the case of dome tents, the wind direction should be considered, and the tent should be pitched so that its longest side is parallel and not at right angles to the wind direction. Care should be taken to prevent strong winds from blowing away parts of the tent. Tent pegs should be driven into the ground at an angle, with the head of the peg away from the tent.

Tent pegs can be packed down with rocks, but never place rocks on top of the guy ropes, since friction will soon wear the rope to shreds. Make sure that the tent flaps and sides are pulled taut and not skew.

The use of a light ground sheet under a tent (even, or perhaps especially, for tents with a built-in ground sheet) is recommended. It protects the tent floor against sharp objects and it is cheaper to replace a ground sheet than an entire tent.

In rainy weather you should try not to let the inner tent get wet.

If you have to pitch the tent in the rain, pitch the outer tent first if this is possible, and then the inner tent. Otherwise, the outer tent can be spread out over the inner tent while the inner tent is being pitched. Schoolchildren going on their first hiking trip should practice pitching their tents beforehand; the same goes for anybody who has purchased a new tent.

The task of cooking teams is simplified (particularly in bad weather) if the persons sharing a tent are also in the same cooking team and if tents housing people who will be cooking together are grouped together. These tents can be pitched with their openings facing each other to simplify cooking.

## **Striking camp**

Striking camp is simply the reverse of pitching camp. All the tent pegs should be cleaned and counted to ensure that none are lost. A tent which is wet from dew or rain should be spread out to dry a little; it can be packed last of all.

Ensure that any fire that has been made is properly extinguished and the coals covered with sand. Check the camp site and the area around it before leaving to make sure that nothing remains behind and that all rubbish has been removed. A few days after you have left it should be virtually impossible to see that anybody camped there. Once you are back home, tents should be hung outside to allow them to dry properly.

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## ***Sleeping—warmth and comfort***

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A sleeping bag is indispensable on any hiking trip. It is worth your while to invest in a good quality bag, which should be kept dry and clean and stored loosely folded.

## Comfortable sleeping

The following suggestions will help to make sleeping outdoors more comfortable:

- Sleep with your head higher than your feet on a slope.
- It is not necessary to take along a cushion on a hike: use your sleeping bag stuff bag, stuffed with extra clothing or a towel.
- Do not wear shoes or wet clothing inside the tent.
- Tins, wet clothing, ropes, stoves and water bags and rucksacks can be stored in the bell of the flysheet.
- Sleeping with too much clothing on restricts blood circulation and causes you to feel colder.
- Keep your torch handy when you get into your sleeping bag.
- In cold weather it is very important to keep your head warm. Use a balaclava if the sleeping bag hood cannot be drawn over your head.
- Insulate yourself from the cold ground by means of a closed cell foam pad, an inflatable mattress, or, in an emergency, clothing, a rucksack or a rope.
- Do not pull the sleeping bag too tightly against your body. The air trapped inside the bag should perform an insulating function.
- Keep your water bottle handy in case you become thirsty during the night.

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## Hygiene

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### Toilet arrangements

Most hiking areas have no toilet facilities. A small spade should be carried and all faeces should be buried approximately 15 cm deep, since it decomposes quickest at this depth. When digging the hole, the soil should be disturbed as little as possible and, if possible, should be removed and replaced in a single sod. The hole should be at least 30 m away from all sources of water and should not be in a place where it can be washed open easily by rainwater. Do not damage the vegetation. Do not urinate in rivers — bilharzia is spread in this manner.

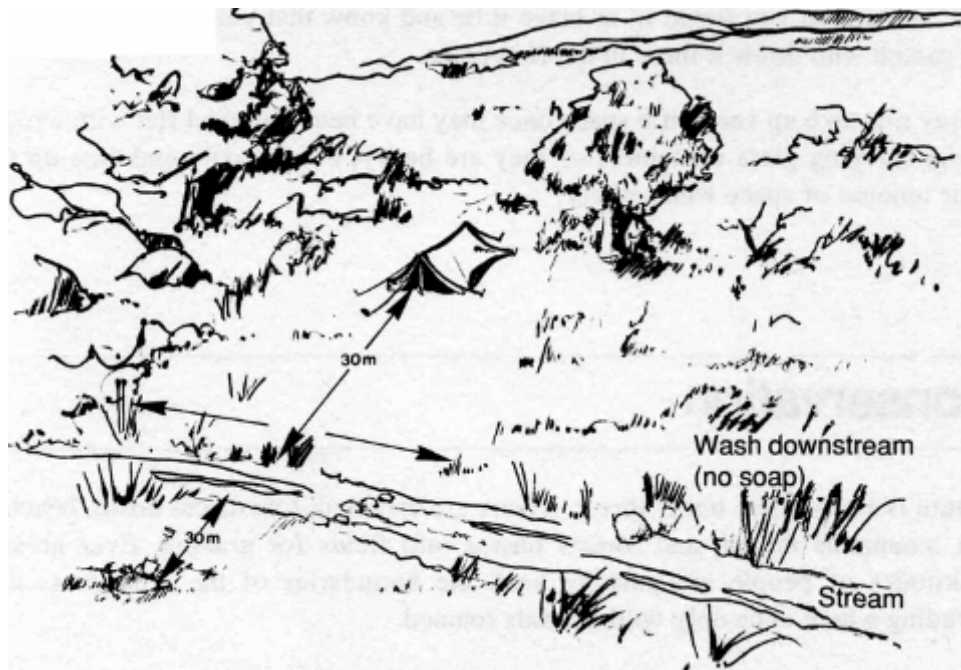
### Bathing and washing dishes

The five-litre water bags found in cool drink boxes or wine boxes are excellent for use as water bags in camp. They weigh little, take up almost no space when empty, and are quite strong. Devise a carry bag with a handle and an opening for the tap, or use a plastic shopping bag. These bags can serve as a back-up to your water bottle for carrying water, but should preferably not be used for carrying water in your rucksack.

Dirty pots can be cleaned without dishwashing liquid or soap if you heat a little water for washing up and then use some sand or grass to scour them. Put some water (warm water if you cooked fatty foods) in your dirty dishes immediately after eating. Particularly in summer you should resist the temptation not to wash dishes, or you might end up with a serious stomach upset.

#### *The upstream-downstream approach to camp hygiene*

If you have to use soap, collect water in a Billy can, do your washing in the billy, and pour the water out



at least 30 m away from any river in a spot from where the soap residue will not be washed into a river by the first rains.

Always wash and bathe downstream from the camp site and collect drinking water upstream. **Do not use soap, shampoo or dish-washing liquid in rivers or rock pools, even if the cleaning agent is claimed to be biodegradable.** The general rule to observe is: Allow nothing to get into the water which you are not prepared to drink yourself. Such substances can destroy all life in a mountain stream; in addition, rivers are often farmers' only source of drinking water.

## Rubbish

Under no circumstances should rubbish be buried — it should always be taken with you when you leave. Every member of the party should carry a sturdy rubbish bag for his personal rubbish and for carrying out any litter you may find on the hike. If you come across broken bottles, tins, sweet wrappers and other rubbish, you can either pick it up and experience the satisfaction of knowing that you left the area a little better than you found it, or leave it be and know that you are no better than the person who threw it there in the first place.

Empty tins take up very little space once they have been knocked flat with a rock. Avoid carrying glass containers — they are heavy, break easily and take up the same amount of space when empty.

## Conservation

Nature is everywhere under threat. Rivers are dammed, forests cut down, beaches and mountains mined, and forests turned into fields for grazing. Ever greater multitudes of people are pushing back the boundaries of the wilderness and intruding where once only wild animals roamed.

As the scientist James Lovelock observed, ours is a living planet. When we chop down its trees we hurt

the lungs of our planet and destroy its capacity to make the oxygen we need to breathe. When we poison its rivers and oceans we ultimately hurt ourselves, for we ourselves consist mostly of water. For every plant or animal species which is lost, the rich biotic diversity of our planet shrinks, and we grow poorer.

Every wilderness leader has a wonderful opportunity and a great responsibility to shape attitudes and habits by precept and example and to show people that it is possible to live for a privileged moment in a world of untouched natural splendour without destroying it.

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## ***The minimum impact approach***

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A leader of a party to the hills must ensure that the activities of his group have the minimum impact on the environment. At the same time he has a golden opportunity to engender in the members of the group an understanding of, and long-term commitment to, conservation issues. Group members must be made aware that each of them has a responsibility towards the environment. In particular, young people or people who are new to the outdoors and to the concept of conservation need to be taught to respect nature and to help preserve it through a practical and consistently applied set of guidelines.

No set of rules can force people to respect nature. However, it is possible to control and guide the actions of your party, preventing actions that could damage the environment and encouraging behaviour which helps to preserve it. Footpath erosion, damage to walls, fences and gates, unsightly and damaging litter, veldt fires, pollution of water sources, and campsite damage are all within the power of the leader to control. Failure to do so can result in the permanent loss of access rights to nature areas (see Chapter 5 in this regard). The following guidelines, published by the MCSA for the guidance of non-members on outings, constitute a basic outdoor code of behaviour:

### **MCSA outdoor code**

- Refrain from picking flowers or damaging any plants.
- Refrain from damaging walls, gates or fencing in any way whatsoever.
- Do not take dogs or other pets or radios or tape recorders on outings.
- Leave the campsite clean and tidy and as you would wish to find it.
- Carry away all tins, bottles and plastics and dispose of them at home. Do not bury any rubbish.
- Stoves must be used for cooking. Take every precaution to avoid veldt fires.
- Never do anything which may contaminate the streams — they supply the farmers with drinking water in many cases.
- Sanitation: operate well away from campsite and water supply, use a digging tool, and bury properly.

Observance of the following guidelines will further help you and your party to reduce the impact you have on the environment:

### **Travelling to the mountains**

Try to avoid the temptation to park as close as possible to the chosen objective. If there is a designated parking area, use it and walk from there.

## Paths and erosion

Popular paths and tracks suffer serious erosion through heavy rainfall, and gullies and dongas result.

- Tread carefully in these areas, if possible walking on rock or stony ground.
- Do not cut corners on zig-zag ascents or descents.
- Avoid running down scree; take alternative routes, if possible.
- Walk in single file to avoid making a second path.

## Walls, fences and gates

These are used for the demarcation of land and to keep livestock in.

- Use gates, even if it entails a diversion.
- Leave gates as you find them — 'he who opens closes'.
- Keep to footpaths across enclosed land.

## Old fire places

If fires are prohibited in the area and you come across fire places (often at camp sites), these should be cleaned up so thoroughly that nobody can see that a fire has been made there. Otherwise, despite what may be written on their permits, people might get the erroneous impression that fires are customary.

## Beacons

- Do not build unnecessary beacons; if they exist, do not add to them.
- Do not knock them down.

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## *Fires and the use of stoves*

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Because the environment is disfigured by fireplaces, you should, if at all possible, try to get along without making a fire. The making of fires in places where no fire has previously been made must also be avoided.

Find out before the trip whether the making of fires is permitted in the area where the hike is planned. On National Hiking Way trails fires may be made only at designated places at the overnight huts. In most wilderness areas administered by the Department of Forestry, the Parks Board, or the Mountain Club of South Africa, the making of fires is strictly prohibited. In most cases, therefore, the rule is simple: **do not make fires!**

## General fire safety precautions

- Never leave an open fire (or a burning stove) unattended.

- Never pour any fuel on a fire which is reluctant to get going: fuel vapour in the air could ignite, or the flame could surge up the stream of fuel being poured from the container in your hand, enveloping you in flames.
- Do not burn plastics.
- Douse the whole area of the fire with water until a puddle of ash and charcoal remains. In the absence of water cover all live or hot embers with earth.
- An open fire must have a clear area of at least three metres around it.
- The main cause of fires in tents is the incorrect use of stoves, cigarettes, lamps or candles. Do not fall asleep if any one of these is still lit. Break long candles in half to make them less unstable. Do not use open candles inside the tent.
- Do not light any fire on hot, windy days. (See also the section on veldt fires in Chapter 8.)

## Precautions to observe when using stoves

### Working with fuel and gas containers

- Always use the correct type of fuel for your stove. Do not overfill the stove.
- Fuel containers must be leak-proof and clearly labelled and should be stored well away from the stove.
- Change gas cylinders and refuel stoves outside and far away from candles or an open flame.
- Never refill or attempt to prime a hot stove.
- Ensure that the filler cap is always screwed down properly. Never unscrew the cap while the stove is alight.

### Working with stoves

- Inexperienced hikers should practise at home first how to operate their stoves.
- It is always dangerous to cook inside a tent. If, owing to bad weather, it is not possible to cook outside, you can cook under the bell of the flysheet. Adequate ventilation in the tent should be ensured to prevent the build-up of poisonous gases. If you have to cook inside a tent, do so close to the entrance.
- Gas leaking from an L.P. cylinder inside a tent can collect in a layer on the tent floor (gas is heavier than air) and this holds a danger of poisoning and combustion. Especially in cold conditions a gas cylinder may seem empty, while still holding enough gas to cause an accident.
- Stand the stove on a firm base in a position where it will be unlikely to be knocked over.
- Remove pots from the stove before doing anything to the stove. Use a billy grip to hold the pot when stirring the contents.
- Benzene stoves are fitted with a safety valve. If the stove overheats this will release built-up pressure in a pencil of flame. It is unlikely the fuel in the tank will explode; just turn off the jet and blow out the flame on the safety valve. If all else fails, quickly move the stove outside.



- Cook in the lee of a rock, tent or rucksack to shelter the stove from the wind. For the same reason, use a windshield to conserve heat and save fuel (an effective windshield can be improvised from tin foil). Always use a lid on a cooking pot to save fuel and time.

## Accidents involving fires

On a hiking trip, most crises involving fires are of two kinds:

- Exploding or igniting stoves or fuel bottles.
- Tent or sleeping bag fires (sometimes caused by falling asleep while smoking).

In both cases, smother the flames using anything available, other than synthetic materials. If water is available, douse the flames.

If a small fire starts in a tent, it can be extinguished quickly by smothering it with clothing or a sleeping bag, but if the side or roof of the tent catches alight it is vitally important to get out immediately. Smother the fire by dropping the tent poles. The loss of a tent through fire could result in a serious situation arising if the weather deteriorates.

In case of fire, modern tents and clothing made from synthetic materials often cause serious burns when they melt and stick to the skin. In this regard wool and cotton are safer materials.

You should make all the members of your party aware of the hazards of synthetic fibres, for example when working with a stove while wearing a jacket made of synthetic fibre. If such a garment should catch alight, the person should immediately smother the flames by rolling on the ground; other members of the party can help to smother the flames, using a blanket or clothing not made from synthetic material.

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## Lighting

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- Each person on a hike must carry a torch.
- Extra batteries and bulbs should be carried, and you should always check both the torch and the spare bulb and batteries before leaving home.
- Head torches (for example the Petzl type) free the hands and are therefore very useful while cooking or walking at night. If you use a hand torch, tie a wrist cord to it.
- One or two people in the group can carry an alternative source of lighting such as candles, a lantern or a small gas lamp. The so-called 'hurricane' lamp which works on a 200 g gas cartridge gives 16 hours burning time, providing 65 candle power.
- A candle can be made safer and more reliable by improvising a small container that will prevent it from falling over or being extinguished by the wind. A good windshield for a candle can be made from a two-litre plastic cool drink bottle:
  - Remove the black bottom plastic cover (pouring hot water into the bottle will cause it to come off).
  - Cut off the top of the bottle and discard it.
  - Make some air holes in the bottom of the bottle.
  - Plant the candle in sand in the black bottom part which you removed, and use the top part as a windshield.



- To carry this windshield in your rucksack, just stuff it with clothing.

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## ***Bivouacs (emergency camps)***

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Emergency camps become necessary when something goes wrong (for example, in case of an accident) and it is decided to pitch camp immediately, before the members of the group become too wet, cold or dispirited.

If your group is lost in misty, cold conditions or in the dark it would be a waste of energy to walk around aimlessly. Instead, the following procedure should be followed (see also Chapter 8, *Mountain Hazards*):

- Above all, ensure that the members of the group stay together and that nobody becomes separated from the group.
- Ensure that everybody puts on enough wind- and waterproof clothing before they feel cold. It is very important to keep the head covered if it is cold or raining, since a great deal of heat can be lost quickly from the area of the head.
- If you are on a mountain, try to lose as much height as possible if you can see where you are going. Otherwise, you should pitch camp, even though the camp site may be less than perfect.
- Try to choose a place sheltered from wind and rain, even if only in the lee of a boulder. You can also use rocks, branches and shrubs or a ground sheet to build a shelter. A ground sheet and a length of rope are extremely useful for the erection of an emergency shelter, and should form part of your standard hiking equipment.
- Sit on a coiled rope or on bracken, heather or other shrubs and grass to insulate yourself from the cold ground. Place your feet inside your rucksack to conserve heat.



*Improvised shelter in an emergency bivouac situation*

- Put on extra dry clothing if it is cold, with the driest clothes against your skin. Ensure that clothing does not restrict blood circulation. Loosen shoe laces. Try not to keep your body sharply bent.
- Use a ground sheet, raincoat or big polyethylene bag to protect yourself against wind and rain. (The large 'survival bags' are ideal for this purpose.) Climb into the bag and pull it up around your head, leaving only your mouth and nose exposed.

- Take your arms out of your anorak sleeves and fold them across your chest inside your anorak, with your hands in your armpits to keep them warm. Huddle together for warmth.
- Energy requirements increase when it is cold. Eat emergency rations at intervals and make hot drinks if you have the means available.
- Remember that morale is extremely important. Try to remain cheerful and to boost the morale of the members of the group at all times, even if you are worried.
- If your party is overdue, get to a telephone as soon as you can find your way and inform the contact person back home that you are safe.