Flights may be booked directly with an airline or through a travel agent. If booking a package through a commercial provider flights may or may not be included. It's important to ensure that any monies paid are safeguarded and that any booking agents have appropriate security such as an Air Traffic Operators Licence (ATOL) and an Association of Bonded Travel Organisers Trust Ltd (ABTOT) Bond, who can both provide financial security.

2.9 Travel within your destination country

Internal flights within destination countries are not covered by ATOL or ABTOT *(see **2.8 Travel to your chosen destination**)* unless they are booked prior to leaving the UK and are part of a flight package. These flights are often booked separately either online, through a local in-country agent or by yourselves on arrival.

FIGURE 2.06 TRAVELLING IN BOLIVIA Photo: Jon Garside

FIGURE 2.07 TREKKING WITH MULES, NORTH OF CUSCO, PERU Photo: Outlook Expeditions

FIGURE 2.08 BAGGAGE CARRIER Photo: Outlook Expeditions

Prior booking or knowledge of the flight schedules of these smaller companies may save many days of waiting in small airports. Some flights to mountain airstrips are limited by time of day and weather. These smaller aircraft may have a lower baggage weight allowance compared to international flights so this is worth checking in advance. Often the operating companies will only charge a few pounds per kilo for excess baggage unlike the international carriers who will charge many tens of pounds per kilo.

Most fun and memories will come from journeys made by bus, train, taxi or boat. Public transport can be the most engaging with plenty of opportunities to meet local travellers and their livestock!

If making travel arrangements in-country you'll find that guidebooks such as *Lonely Planet* or *Rough Guides* will help with where to catch buses and trains and give an idea of costs and timetables.

It is usually easy to negotiate private hire vehicles either independently or via a local agent. These may be self-drive cars, 4x4s or a bus. Beware that standards will be different to those of the UK and Europe. Try and find out what sort of vehicle and driver licensing there is and ensure everyone is aware of what to expect.

Before departure satisfy yourself that the transport offered is of an acceptable standard and be prepared to ask for an alternative if you feel that it may compromise safety.

Check the condition of the vehicle, seat belt use, driver health and ability and the condition of the roads. The leader should also have the means and courage to communicate with a poor driver.

Finally avoid travel at night. There have been instances of tourist buses being stopped and passengers robbed plus there is the danger of collision with other motorists not using lights!

2.10 Specialist accommodation – Alpine huts

All the European Alpine Countries have a well managed system of high mountain huts, most with a Guardian resident throughout the late spring/summer months. In the autumn and winter there is unlikely to be any resident staff; however most will have a winter room consisting of a dormitory and somewhere to cook. This is replicated in other mountain areas such as New Zealand. Some huts are private and many are run

FIGURE 2.09 TYPICAL ALPINE HUT, THE RIFUGIO ALIMONTA, THE ITALIAN DOLOMITES Photo: Bob Kinnaird

FIGURE 2.10 DINNER TIME IN A BUSY ALPINE HUT Photo: Bob Kinnaird

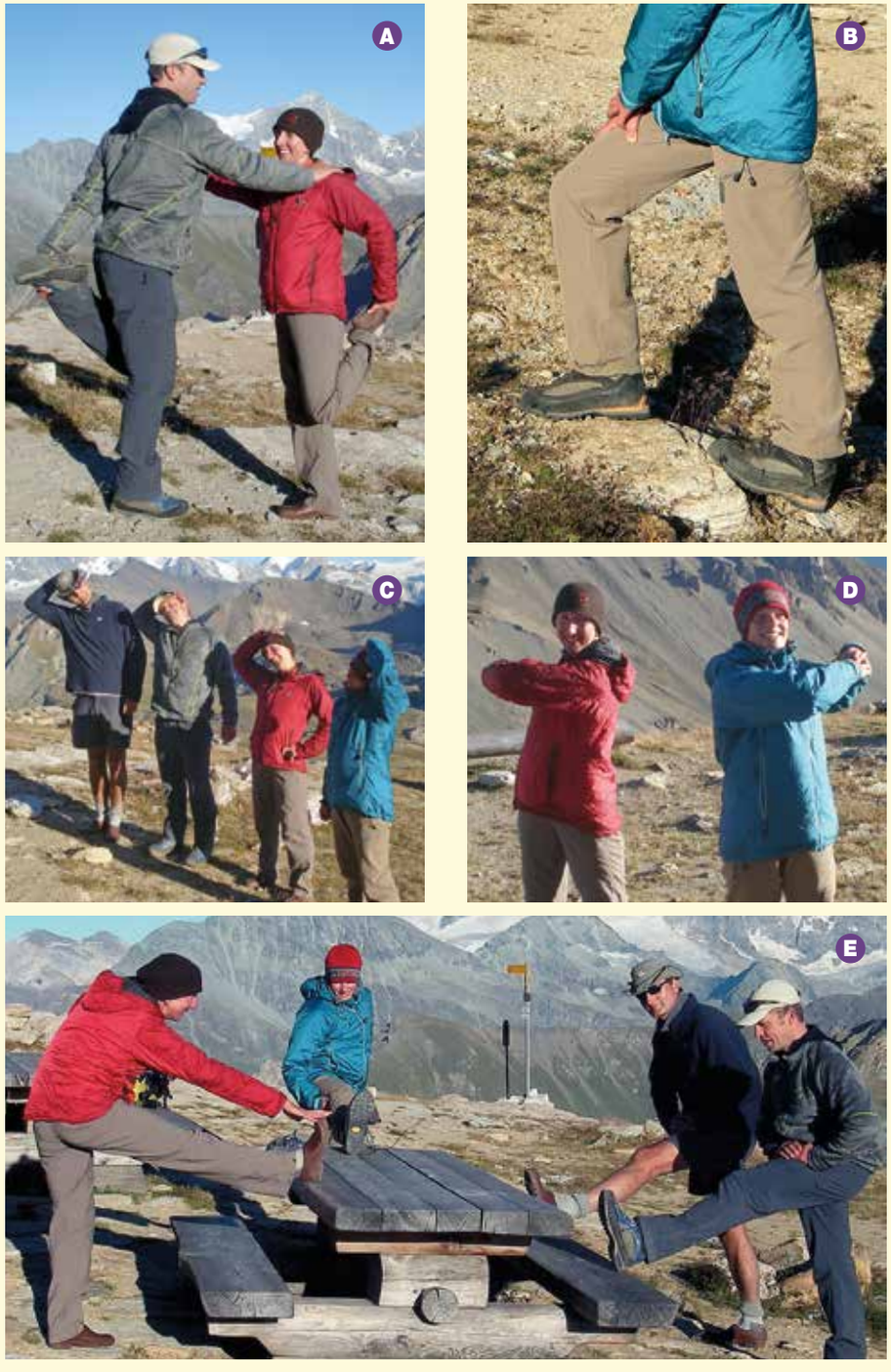

FIGURE 4.07 STRETCHING EXERCISES: **A** THIGH STRETCH **B** CALF STRETCH **C** NECK STRETCH **D** SHOULDER STRETCH **E** HAMSTRING STRETCH Photos: www.pyb.co.uk

4.7.2 Progressive overload

The cardiovascular system and muscles increase their capacity for exercise if training is progressive and overloaded. The training programme must stress the system above the level to which it is accustomed to have any improvement on fitness. For example, a mountain walker needs to progressively increase the length of walks undertaken, height ascended and descended, increase walking speed or increase the weight of rucksacks carried.

4.7.3 Reversibility

When training is stopped for a significant period of time, the level of fitness is reversed. It is suggested that those who have undergone a relatively short period of training exhibit the fastest rates of reversibility, whereas those who have trained for long periods of time appear to be able to sustain their fitness for a longer period.

4.7.4 Variety

The lack of motivation to train over time is often caused by the lack of variety of exercise. Individuals are more likely to maintain their fitness regime by varying the activity each week and finding a way of enjoying it.

4.7.5 Warm up and warm down

Although strictly not a principle of training, a warm up and warm down play an important role in any exercise. A training session should include a warm up, the work out and then the warm down. The purpose of the warm up is to raise the temperature and increase blood flow to the muscles and the body, increase alertness and reduce the risk of injury. It is also recommended that stretching should be included in this phase.

The range of movement in the warm up should reflect the range of movement specific to the activity about to be undertaken. For example, footballers should include running forwards, backwards and changing direction, and kicking the ball.

The warm down at the end of a training session is essential to decrease body temperature and remove waste products from the working muscles. Static stretches are more appropriate at the end of the session as they help the muscles to relax, realign fibres and re-establish their normal range of movement.

The illustrations *(see Figure 4.07)* are of the range of stretches useful after an arduous walk to an Alpine hut. It is important, particularly on multi-day trips, to include warming up and warming down as part of the daily routine. Stiff and sore muscles will ultimately lead to a reduction in performance over time. Delayed Onset Muscle Soreness (DOMS) occur through overuse of underprepared muscles. RICE (Rest, Ice, Compression and Elevation) are effective treatments, though not all at the same time!

Even the journey to a foreign country can present issues with regards health. The stress of busy airports, lack of food and sleep, dehydration due to air conditioning on the plane are factors that may affect the body's immune system, making it more susceptible to problems on arrival in-country. Therefore plan the journey carefully, make sure you have adequate food and drink available, try to sleep and rest when possible plus factor in some recovery time at the destination.

FIGURE 4.08 MORNING STRETCHING SESSION BEFORE A DAYS TREKKING IN GREENLAND Photo: Nigel Williams

FIGURE 7.25 TYPICAL SUSPENSION BRIDGE CROSSING IN TORRES DEL PAINE Photo: Helen Barnard

7.11 Water hazards

Throughout the course of a trek it is possible to encounter all manner of water hazards from streams and rivers to lakes and marshes. Even hotel swimming pools and beaches at some destinations can present issues. **When planning and especially if there is a likelihood of confronting any water hazards consider acquiring both training and suitable equipment to deal with such issues.**

7.11.1 Lakes

There can be nothing more refreshing at the end of a hard day's trekking than to have a quick dip in a lake. Caution should be exercised, particularly in deep water where it becomes difficult to assess the depth, content and temperature of the water. Often mountain lakes are much colder than anticipated and people have been known to drown due to cramp seizing the muscles *(see Figure 7.26)*.

7.11.2 Marshes

Many foreign maps do not mark marshes and boggy ground in the same way as found on UK maps. This can make planning and anticipation of such hazards difficult; however observing the vegetation while trekking provides the best indication to these areas. These hazards can be difficult to assess and negotiate, often with hidden issues such as holes, subterranean streams and animals. In many developing countries the stagnant nature of the water found in marshland areas can also present a risk from disease.

7.11.3 Tidal

Treks may start or finish at the coast so a word on the hazards of tidal regions is not misplaced at this point. The nature of the tide and sea in any particular location will be unique and should therefore be treated with caution, especially by people with little experience of the ways of the sea. Tidal ranges and currents are very specific to one location and coupled with the prevailing weather conditions can be very difficult to predict. Without good local knowledge it will be difficult to determine the depth and nature of the seabed and if any undercurrents exist that may catch people unawares. The marine life that inhabits certain locations may also present a risk, once again highlighting the need for research and caution.

FIGURE 7.26 A BREAK FROM THE TREK BUT NOT FROM POTENTIAL HAZARD Photo: Outlook Expeditions

7.12 River crossings for trekkers

Crossing water is a relatively common challenge facing trekkers in many areas of the world. Without doubt a 'wet' crossing represents a high level of risk to the participants and should not be undertaken if a 'dry', safer alternative is practical. Any leader must conduct a dynamic risk assessment and be confident that the benefits outweigh the risks.

The time of year can have a profound affect on water levels; the monsoon season could see a trek having to make a major detour or having to wait a considerable time while the waters receded enough for a safe crossing. While this may be localised and difficult to plan for, any advanced consideration given could save the itinerary. In practice once all possibilities of a dry crossing or waiting have been discounted a wet crossing is the only option and has to be carefully planned and managed to ensure safety.

FIGURE 7.27 SIMPLE STREAM CROSSING Photo: Helen Barnard

Leader's Information

Water safety training

A number of organisations have developed modules on supervising groups along rivers, lakes and the sea making this valuable additional training for leaders taking groups to some environments.

FIGURE 10.05 PIVOT BINDINGS ALLOW THE SNOWSHOE TO PIVOT AND THE TAIL TO DROP AS YOU WALK, LETTING SNOW SLIDE OFF AND ALLOWING FOR EASIER CLIMBING. FIXED BINDINGS DON'T PIVOT VERY MUCH AND KEEP THE HEELS LEVEL WITH EACH STEP, MAKING FOR A MORE NATURAL STRIDE ON FLAT TERRAIN AND MAKING IT POSSIBLE TO WALK BACKWARDS.
A PIVOT BINDING. B FIXED BINDING.

10.3 Bindings

Bindings are used to secure boots to snowshoes and usually consist of a platform and nylon straps that go over the foot and around the heel. When choosing snowshoes it is important to make sure they are compatible with your footwear and that the binding system is easy to use especially with gloves on *(see Figure 10.05)*.

Bindings are either pivoting or fixed. Pivoting bindings allow for a more natural gait and an easier time climbing hills or kicking steps. Fixed bindings don't pivot very much, but make it easier to reverse or step over obstacles, since the snowshoe's tail doesn't flop around. Most bindings will work with a wide variety of footwear. However some are designed specifically for larger mountaineering or ski boots, or to snugly fit running shoes. So make sure the bindings will work with any preferred footwear.

FIGURE 10.06 TRACTION AND TAIL EXTENSIONS

10.4 Traction devices

Although your weight provides some traction by pushing the snowshoes into the snow, many designs feature tooth-like crampons or cleats for greater grip. Recreational-style snowshoes will typically offer moderate amounts of traction, while mountaineering snowshoes will generally have more aggressive crampons and cleats for steep rugged ground and icy conditions.

- *Toe* or *instep crampons* are located on the undersides of the bindings, so they pivot with your feet and dig into the snow as you climb. This is the primary source of traction for any snowshoe.
- *Heel crampons* are placed on the decking undersides of many snowshoes. They are frequently in a V formation, which fills with snow and slows you down on descent.
- *Side rails* on the decking undersides provide lateral stability and reduce side-slipping when traversing slopes.
- *Braking bars* are integrated into the undersides of plastic-decking snowshoes to provide forward traction and prevent sliding backwards.

FIGURE 10.07 COL DE COU, SWISS-FRENCH BORDER Photo: Caroline Hale

10.5 Heel raisers

Also known as *climbing bars*, these wire or plastic bails can be flipped up under the heels to relieve calf strain on steep uphill sections and save energy on long ascents *(see Figure 10.08)*.

FIGURE 10.08 USING HEEL LIFTERS ON MODERATE GRADIENTS HELPS TO KEEP THE FOOT LEVEL WHEN WALKING IN SNOWSHOES UPHILL. THIS CAN IMPROVE STABILITY AND BALANCE WHILE REDUCING STRESS ON THE LOWER LEG.

10.6 Snowshoe size

Correctly sizing snowshoes for a person is largely determined by the approximate weight that will be placed. This should not only take account of body weight but any extra equipment they may carry. For example if they are travelling with a heavy rucksack on expedition they will probably require a larger snowshoe compared to normal. In general, the heavier the person or load, the bigger the snowshoe will need to be to disperse the weight in order to keep that person on top of the snow. Snowshoe size is also partially determined by terrain and snow conditions. For example, larger shoes are required to keep a person afloat in light powder snow than are necessary in wet, packed or icy snow. Some designs offer the flexibility to add an extra section to the tail increasing the amount of float. As a rule of thumb, use the smallest size that will support your weight for the snow conditions and terrain. As long as there is adequate flotation, smaller snowshoes will be much easier to handle and manoeuvre. To assist with sizing manufacturers often design models for different weight

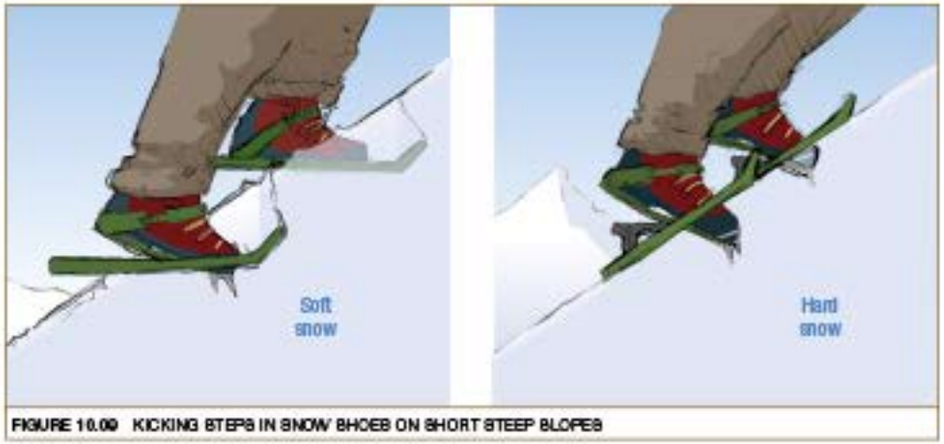

FIGURE 10.09 KICKING STEPS IN SNOWSHOES ON SHORT STEEP SLOPES