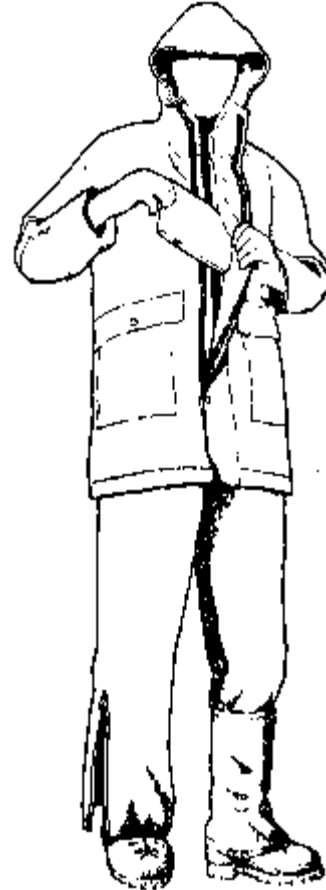


## SHELL CLOTHING

When you require something to keep the rain out what do you do? Do you buy a cheap nylon cagoule or an expensive "breathable" jacket? Here are some pointers to help you.

Rain will seep through stitch holes along the seams so make sure that all seams are "taped". There can be as much as 20m (20 yds) of tape on a jacket and because it is a time-consuming, manual job to affix the tape, such garments cannot be "picked-up for a fiver at the market".

What makes a garment waterproof is usually not the outer material, but the layer coated or bonded onto the inside of that material. Polyurethane (PU) is the most commonly used compound whilst the harder wearing (and more expensive) neoprene is slowly disappearing. More and more "breathable" materials are now coming onto the market.



Another point to look out for is the garment's design:

Are the pockets watertight? or do they leak?

Does the hood cover the head fully? or will it leave your cheeks exposed to cold, biting rain/snow/hail?

Are the cuffs "storm-proofed"?

Is the front zip storm-proofed with a press-stud/Velcro flap?

Do the leggings have zipped gussets (for ease of undressing)?

## Waterproof/Breathable Garments

Some people complain that their waterproof/breathable garments lose their 'breathability' and/or begin to leak. Whilst it is possible that a very small number of items may be affected by manufacturing problems, there are more common reasons why these garments appear to fail:

Absorbent clothing (such as cotton) being worn under the jacket. Perspiration is soaked up by the cotton, giving the impression that the jacket is 'leaking'.

Cure: wear fast-wicking synthetic fibres that do not absorb perspiration.

Dirty face fabric. This prevents perspiration from escaping.

Cure: wash the jacket.

Dampness around the neck, hem and cuffs.

Cure: Seal these areas with the jacket's drawcords and velcro tabs to stop water dripping in or being drawn up into the garment.

Dampness under the parts of the jacket in contact with rucksack shoulder straps.

Cure: perspiration is unable to escape because its progress is impeded by the straps, so open the front zip and/or underarm pit zips whenever practical to help as much perspiration escape as possible.

On the outside (or 'face fabric') of new waterproof garments is an invisible

water repellent coating that encourages water to 'bead' on the surface of the material. After use this coating wears down, allowing the face fabric to become saturated (known as 'wetting-out'). This affects the garment's performance and can reduce its 'breathability'. The coating can be replaced with one of a number of proprietary spray or wash in treatments. Check that the treatment does not contain a waterproofing agent that might itself further reduce the garment's breathability.

In heavy weather with driving wind and rain it is not always possible to have your zip opened so if you are using non-breathable rain wear it is necessary to have a soaking device under the jacket. A pile fibre fleece lined jacket is sometimes employed for this purpose as it will still retain heat when wet. A good woollen pullover will also do the job but will become heavy, and take a long time to dry.

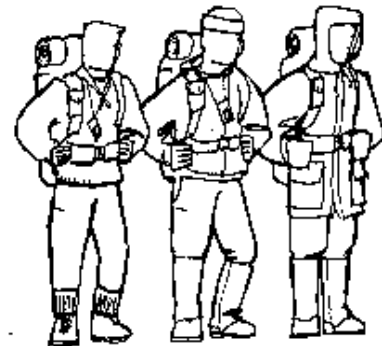
Remember that a waterproof/breathable jacket is not a cure for all ills. There are some climactic conditions when the material will struggle to perform (such as ultra-humid or ultra-cold conditions). Nor will it stop you perspiring. Regulate your perspiration output by removing layers of clothing so the perspiration does not have to pass through so many garments.

## Care

All outdoor clothing, from waterproofs to base layers, works better when clean. As a general rule, clothes should be washed in warm water (30°-40°C) with mild soap rather than detergents. To remove stains, first try gently rubbing the face fabric gently with a soft brush, or alternatively speak to your

### Overtrousers

Overtrousers complete the set of outer rain gear and afford protection for your legs. Overtrousers can take many forms from simple chaps which are tubes of waterproof or breathable nylon which are tied up to your belt to the expensive Goretex designs. Zippers at the bottom to are essential to allow them to be put on over boots.



retailer to find out if a proprietary stain removing product can be applied without adversely affecting the material's performance. If you wash your clothing during a trip, please ensure that you use an eco-friendly soap in a bowl well away from water sources.

## Gaiters

An additional item of equipment which some people find essential are gaiters. Gaiters are short knee length coverings to protect your boots and prevent stones, heather, and thorns from ripping your legs. Some gaiters afford

enough protection to allow you to walk across streams without allowing water to enter your boots. Again the cost of such equipment varies and it is quite possible to make your own with ease.

## Headgear

Up to 30% of your body heat escapes through the head and if the neck and shoulders are included it rises to nearly 60%. Head protection therefore is important. Wind plays a particular part

in loss of heat through your head and most people opt for a fleece or woollen hat as protection. If harsh weather conditions are expected, a balaclava type hat is essential.

## Gloves

Gloves or mittens should be carried in your rucksack in all seasons. Fleece mitts with a nylon outer have excellent heat retention and windproof properties. You

should steer away from leather gloves as in wet conditions are next to useless. In snow conditions it is advisable for the nylon outer to be waterproof.