



Clothing & Equipment

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Young people should only be walking in Wild Country if they are adequately clothed, have the appropriate equipment and know how to use it both in the prevalent and often changing conditions.

Dartmoor in particular can, and sometimes does provide 'four seasons in one day'; you must be ready for all eventualities during the training phase and the Ten Tors Challenge. Snow and floods have both caused early termination of the Event; and on occasions, heat exhaustion has led to high fallout rates.

Awareness of hypo/hyperthermia and the requisite preventative measures and appropriate care management are all vital aspects of training. Understanding how kit can protect from the extremes of weather makes a critical difference to effectiveness. If the walkers know what their kit can do for them, understand how and when it should be deployed, it can make the difference between success and failure.

The *Ten Tors Clothing and Equipment Guidance* advises the minimum clothing and equipment to be carried during the Ten Tors Challenge by individuals and teams and suggests other items that might be required depending on the weather forecast. The *Guidance* will also be of help to Team Managers for the training period when terrain and duration of the walk will be additional factors for consideration.

MINIMUM RECOMMENDED REQUIREMENT

Prior to Ten Tors training, Team Managers should explain the *Ten Tors Clothing and Equipment Guidance* to their walkers, providing advice so that suitable personal

kit is acquired and that the team kit is of an appropriate type and quality required for both the training and the Challenge. It is suggested that:

- The *Guidance* is issued to all your walkers and their parents so that everyone understands what is required.
- Consider 'unpacking' the *Guidance* text, as more detailed guidance may help walkers/ parents to acquire kit that is both technically suitable and meets the needs of the individuals concerned. Discuss the rationale for the kit requirements with your walkers so that they're able to understand the comfort and performance benefits. Explore the differences between effective, rather than fashionable, kit.
- Inform walkers and their parents of the list of shops on the Ten Tors website offering discounts and knowledgeable advice.
- Ensure that your walkers (rather than their parents and/or staff) have the knowledge and skills to maintain their own and their team kit in good condition. Detergents destroy waterproofness; use Nikwax or similar.

Remind your walkers of the need to match clothing to the prevailing conditions.

Scrutineering

- During the training, you are responsible for the health and safety of your walkers and staff. Consequently, you are advised to scrutinize clothing and equipment prior to each walk.
- It is your responsibility to ensure that participants in the Ten Tors Challenge are suitably clothed and equipped. To save embarrassment, delay and the potential for disqualification, you should thoroughly check kit before the Challenge.
- Selected teams will be required to be scrutinised by the Scrutineers on Friday preceding the Challenge.
- Scrutineers are likely to be reassured if they see kit – both personal and team - that has been well used and is well maintained.

Building Stamina

- Ensure that the **full individual and team kit** is carried as early as possible in the training programme. Loads should not exceed the lesser of 1/3 of the walker's bodyweight or 12kgs without water and food (13.6kgs (30lbs) inclusive of both).

Remote camping skills

- To ensure that participants are familiar with their equipment, all participants should have completed at least two **self-supported remote overnight camps** prior to the event.

Wild Country hygiene

- Human excrement disposal outdoors must be safe and hygienic. Water supplies and the health and safety of other walkers should be protected as well as protecting the environment. Walkers should be taught how to bury faeces and paper in scrapes should there not be a water closet available.

- Wet wipes and anti-bacteria 'dry' hand wash can improve personal hygiene and minimise the risk of food contamination. Alcohol gel is not effective on dirty hands and should not be relied upon for hand washing. Where walkers have no soap/water available, they should use wet wipes (soap/water based and not alcohol based).

CLOTHING

Except for waterproofs and boots, the *Guidance* requires a complete set of clothing and itemises the spare clothing required. Both must be of a similar standard. Spare clothing is of limited value if it isn't dry - use dry bags.

Outdoor clothing is intended to keep the body at a constant, comfortable and safe temperature in all weather conditions. As no single item of clothing can cope with all types of weather and temperature, several layers, each fulfilling different functions, work better. Three layers - base, mid, and outer (or shell) – are the norm.

The *Guidance* advises up to 4 layers above the waist, and up to 3 layers for the legs.

Base Layer. Moisture evaporating from the surface of the skin causes rapid cooling, leaving you feeling clammy and uncomfortable, especially if wearing cotton next to the skin. Unlike cotton, synthetic moisture management garments e.g. CoolMax continue to offer warmth even when wet. Base layer garments have to transport moisture away from the skin, be fast drying, made of wicking fabric with flat seams in areas that rub and be comfortable to wear.

Mid-Layer garments provide thermal insulation by trapping warm air around the body and allow moisture to pass quickly from base layer to outer layer. Non-absorbent 'open weave' fabric should be avoided as they allow the wind to penetrate the fabric, replacing warm air with cold.

For the Ten Tors Challenge it is recommended that 2 mid layers (wind resistant and quick drying) are required for the torso:

- **Shirt.** This has to be of substantial material and, long-sleeved such as a microfleece, sweatshirt or a wicking shirt.
- **Mid layer Fleece or jacket.** A napped synthetic fleece or synthetic microfibre insulation layer is required. Two lightweight synthetic sweatshirts can substitute, but a micro-fleece cannot substitute for a mid-layer fleece.
- **Trousers** must be robust, relatively wind proof and quick drying. Thin nylon tracksuit trousers or tights are not suitable as they provide insufficient protection. Shorts are not recommended for walking because of the prevalence of ticks and Lyme Disease, potential sunburn and scratches.
- **Headgear and Gloves/Mittens.** Cold weather hats should cover the ears. Fingerless gloves are not acceptable; synthetic, rather than woollen gloves, with a water and/or windproof layer provide better protection. It is worth carrying easily accessible spares as a dry hat and gloves are a real morale booster at the end of a tough day's walking whilst you're setting up camp.
- **Outer (or Shell) Layer.** In even a moderate wind, mid-layer garments start to lose their insulation properties in the absence of a windproof outer layer. This protects the underlying layers and the body from the effects of wind, rain and snow, allowing the base and mid-layers to work more efficiently.

The outer/shell layer should be:

- Both breathable and waterproof – potentially needing to provide protection for two days' wind-driven rain. Robust, remaining durable and effective during training and

the Challenge, in spite of being subject to wear and tear, abrasion, and tested by strong winds and rain. Ultra-lightweight jackets offering little or no warmth are not acceptable.

The jacket must have:

- A securely attached wired/stiffened hood.
- Water resistant zips and/or double storm flaps.
- A dry waterproof map-sized secure pocket.
- Hood, waist and lower hem adjustments to enhance protection, and
- Be a little too large – not only can the walker 'grow into it' but the extra size allows room for layers and longer sleeves offer added hand protection.

The over-trousers must be:

- Robust and not ripped in anyway.
- Such that the walker can fit/remove them over their boots without assistance, implying knee length, or longer, zips, which must be undamaged.
- Fit well enough so that they don't impede the walker.

Boots are required to be well fitting and have adequate ankle support and a Vibram-type sole.

- Leather or quality waterproof fabric boots are required for the Challenge.
- Light weight boots, which are essentially trainers with a raised ankle cuff, are neither robust nor durable enough for the Challenge.

For those who are returning to the Challenge, check that last year's kit still fits and is in good enough condition to last through training to the Challenge and ensure that any items which aren't are replaced. Boots that are tight at the start of training are likely to be uncomfortable by the Challenge; better to move up a size at the start of training and temporarily wear an extra pair of thin socks or double footbeds, enabling the boots to be broken in well before the Event.

EQUIPMENT

Rucksacks have to fit the user and will normally be between 50 and 65 litres in capacity to carry the walker's personal kit, their share of the team kit and potentially some of another team member's kit, if necessary. The most bulky item, the packed size of the sleeping bag, has a critical impact on the size of the required rucksack. 'Fitting the user' needs to take account of gender, back length, and ensuring that both the hip belt and shoulder straps can be fitted correctly to ensure comfortable weight transfer. Time spent making sure that rucksacks are correctly adjusted is vital.

Avoid carrying items on the outside of the rucksack as far as possible; where it is unavoidable, ensure that such items are packed in robust waterproof bags and attached very securely so that nothing can be lost, damaged or other walkers injured.

Stoves and fuel – which is most suitable for your team/s? Trangia meths or re-sealable butane/propane gas canister stoves are usually the least problematic. Gas stoves with a separate canister linked to the burner via hose are far more stable – and much safer – than 'all-in-one' stoves unless the latter have a wide stabiliser fitted under the canister. Whilst many stoves have build-in ignition devices, these can fail; matches, together with a suitable 'striker', need to be packed in a waterproof container. Gel fuel" is now being sold as an alternative to gas or liquid fuel. Its use is permitted on the Ten Tors expedition but Team Managers need to carefully consider the robustness of the

pouch in which it is supplied. Gel is a combustible compound and with heavy treatment its pouch container is at risk of being punctured - resulting in leaking fuel. Use of a robust outer container is recommended to provide an additional level of safety and full consideration must be given to the stowage position of the fuel pouch within a rucksack. Ideally it should be in an outer pocket within a strong container and the rucksack should be handled carefully at all times.

All team members need to be properly trained in safe use and associated refuelling to reduce the risks of scalds, burns or explosion. Minimise the risk of tent fires by teaching that cooking is carried out in the open, using windshields when necessary.

Trangia brand meths bottles are preferred for safety and the avoidance of leakage within rucksacks or tents. If using butane/propane gas canisters, always pack a spare full canister per team.

Water Bottles must be of **robust construction** and with a **secure stopper**. Thin plastic bottles are always vulnerable to breakage, resulting in disastrous consequences in a rucksack.

Tents need to be robust enough to cope with Dartmoor's weather. 'Summer' tents with fibreglass poles are often relatively heavy and are not designed to stand up to Dartmoor storms; tents need to be 'fit for purpose' if walkers are to be offered a challenging yet safe experience. A tent pole repair kit, spare cord and pegs are essential.

Sleeping Bags. Key for the manager's consideration are; what is the predicted ambient temperature for the training, will the bag offer the user good thermal protection? The sleeping bag needs to provide comfort down to at least 0°C, often described as 3 seasons. While down filled sleeping bags are light, they are not as effective when wet as synthetic material. Trade-off between the 2 properties needs to be considered and emphasises the

need for sleeping bags to be kept in dry bags.

Survival Bag. A survival bag should be made of heavy gauge plastic to avoid the risk of suffocating the casualty - thin, flexible plastic can be drawn against the face impeding breathing. Bags must be long enough and undamaged – problems usually result from years of being kept folded and unused in the bottom of a rucksack.

Afterthoughts.....

The following are worth considering as "good to have" items:

Bothy Bag. A Bothy bag is a useful group shelter offering rapidly deployable temporary respite in demanding conditions, which keeps the whole team together, whether in need of shelter to minimise the onset of hypothermia or a break for lunch and maintain collective morale, whilst allowing time to regroup.

- **A waterproof map case** is essential if an unwaterproofed map is to survive for long, but don't 'wear' the map case with a cord/ligature around the neck.

Both the 1:50,000 and 1:25,000 Dartmoor Training Area map will be issued; teams should be familiar with navigating using both. Waterproof maps of the area in which you're training are likely to be easier to manage than attempting to refold paper maps back into map cases in wet and windy weather.

- **Mug, knife, fork and spoon** – a mug is useful but use of a 'spork' or just a spoon, will save a little weight.
- **Spectacles/Contact Lenses** - consider carrying a second pair of spectacles or sufficient contact lenses.
- **Rubbish bag** – whilst the Army issues a rubbish bag to each team for the Event, during training, walkers should carry their own personal rubbish bag so that they can remove all litter and debris for disposal at home.
- **Flip Flops** - Flip flops or sandals for when you have taken your boots off for the night stop.