



Downhill all the way



Although thousands of years old, fell-running (or hill or mountain running as it might be known in some countries) is a branch of athletics that tends to generate a high level of hero worship - something that's at odds with the unassuming nature of the majority of its leading protagonists. However, woven into the folklore of many countries are tales of base-born athletes who have won fair lady (or lad) by their prowess on the hills - and the stories often include a modicum of mystical intervention for good measure. With or without mysticism, the sport's modern heroes now have their own legends in this dual facet discipline. Dual, because what goes up must eventually come down. Strength and stamina are required for the outward and uphill route to the mountain summit. Sure-footed confidence and agility are the keystones to final success on the descent to the finishing line.

No matter under what title the events are organised, the terrain can vary widely over the competition area; from smooth grassy slopes - to barren, rock-strewn hillsides - to heather-covered open mountain - to rocky scree. And the long-term aficionados will tell you that races are won and lost on the descents.

The more experienced athletes have all perfected their descent technique through practice on the most variable topography available to them. The best advice is to lean forward and keep the knees slightly flexed. Falls are surprisingly rare as the body adjusts rapidly to the speed and terrain, the runner concentrating on his footing with only an occasional glance to ensure continuity of direction. It's the Irish Mountain Running Association that is credited with the observation that '... a good descent brings out the Wheeee factor in everybody.'

Stresses and strains

The whole of the runner's skeletal structure is under stress for long periods during a

race, but it's the feet that are potentially more liable to sustain damage. Toe-compression, over-pronation, heat build-up and lateral skewing are the main problems. Blistering, 'black' toe, sprains and ligament strain are the results - or would be so if it were not for the art of the footwear manufacturer. Good descents win fell races - and by definition the best footwear ensures good descents.

So what constitutes a fell-running shoe and how does one see the difference between that and a shoe for use on the road or trail? The most obvious feature is an overall lack of bulk in comparison with a standard training or trail-running shoe. The lacing extends almost to the toe for extra security (some racers use extra-length laces and take them under the fore-foot to ensure a solid 'lock' at the toe crease). Next, a thin sole unit with minimal shock absorption (remember the bent knees) to keep the foot closer to the ground. On rapid descents and hillside traverses this feature combats axial twisting and rolling. The heel section is low and straight cut with no lateral flare which protects against over-pronation. Again this helps to ensure stability on the inevitably indifferent terrain. Finally, an outsole tread pattern which offers an almost guaranteed grip in mud, on rock, in grass or heather.

Influential designs and brands

Given the almost solitary, and slightly anarchic, nature of the activity (fell-runners tend not to run in packs) it is perhaps not surprising that the most internationally influential brand name for many years has been that of a small company based in Northern England. Walsh Sports Limited began life as Norman Walsh Shoes in 1961, when the owner of the name often worked an 80-



Note the distinctive pyramid stud pattern on these Walsh PB Trainer 2 shoes.

hour week to produce hand-made sports shoes for the athletes of the day. Steady growth was compounded when Walsh was asked to make special shoes for leading fell runners, cutting a new facet to traditional business and carving an international niche. The distinctive pyramid stud tread pattern of Walsh trainers and race shoes can be found imprinted in the mud of mountain trails around the world - and many a knowledgeable Briton might confess to a spasm of pride as he recognises the passing of a pair of Walshes in some remote corner thousands of miles from home.

Lasted for a narrow, tailored fit, Walsh PB Trainer and Racer models use a mix of textured nylon and synthetic suede for the uppers, other than those destined for the Japanese market where full suede leather and speed-lacing are added to the specification. Recent Mark 2 modifications (after 30 years) have added a rubber rand and a revised EVA midsole topped with Cambrelle. PB Trainers are 4mm wider at the waist for greater comfort during the long hours of race preparation.

Disdaining a simple studded sole, Salomon Sports' Raid Wind shoe uses the company's latest outsole development - Contagrip 2 - a mix of synthetic and natural rubbers moulded with varying degrees of hardness between the central and perimeter areas. Fore-foot compression on descents is controlled by an external support system, whereby the synthetic leather and nylon mesh upper is drawn closer to the foot with a one-pull Kevlar lacing, which in turn is locked with a cleat at the midfoot area. This system, allied to an external heel counter, also contributes to the lateral stability of the shoe. A polyurethane plug located in the EVA midsole under the heel is said to reduce the possibility of over-pronation.

The contending product from the New Balance product range is the RXTerrain - a board-lasted shoe designed specifically for mountain running. Using the company's famed multi-width sizing and C-Cap midsole, RXTerrain nevertheless conforms to the sport's requirement for a glove-like fit and superior grip. The outsole is fully moulded with hexagonal studding. The uppers are constructed in a lightweight mix of synthetic suede and nylon.

Accessorise

The very nature of fell-running shoes and their intended use suggests that any attempt to

promote added value accessories will hit a very difficult market. The only performance factors that truly matter are grip on the terrain - and foot control.

The orthotic footbeds developed by Superfeet Worldwide LLC, of Washington State, offer a range of improvements that were originally based on the fact that over 90% of footwear users suffer discomfort caused by the very equipment they have chosen to wear. Superfeet footbeds do so by improving the positioning of the foot relative to the shoe and to the very act of placing one foot in front of the other.

The company's recommendation to effect an improvement in a fell-runner's stability and performance was the application of its Blue Capsule Synergizer footbed which starts from a cut-to-fit basis, keeps the foot correctly aligned and stabilised - and thereby reduces the stress on muscles and joints. These enable the runners to use their skeletal strength to advantage and should considerably improve performance and subsequent recovery.

In WSA's Spring '99 issue we commented on a fabric known by the brand name etc. which significantly reduces friction and heat in footwear. Superfeet products have a top layer of etc., promising reductions in blistering, fungal growth and toe-box heat build-up - all major factors affecting a competitive performance.

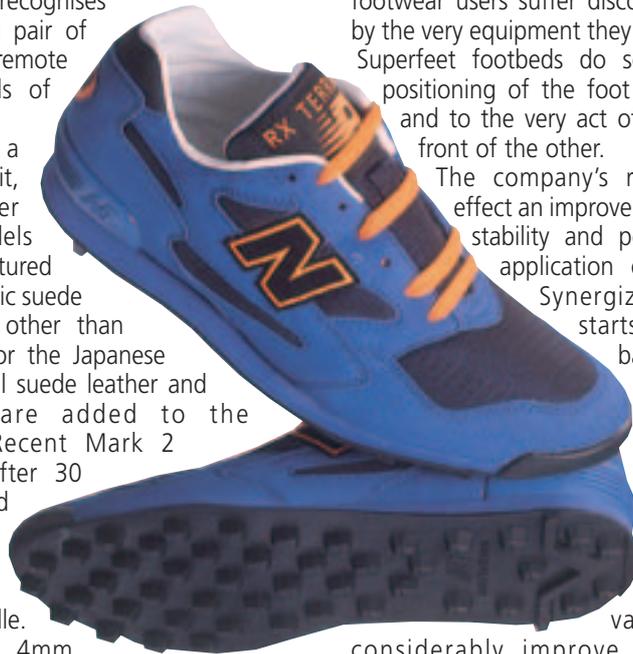
Rewards

In many aspects of modern athletics the rewards for success at most levels are not inconsiderable. Managers are employed, trust accounts established and 'appearance' fees regulated. Consider then the benefits of winning a forthcoming fell race scheduled for late-February in northern England. After completing 11 miles of moorland racing, 2,700 feet of ascent and visiting nine checkpoints - the winning man and woman will receive a pair of Walsh Fell Shoes apiece. All other finishing competitors will receive a can of beer - and possibly a 'Well done.' 



Salomon's Raid Wind model. Contagrip outsole uses two densities of rubber to meet differing grip requirements on rock or grass.

Left: RXTerrain - a specified fell-running shoe by New Balance.



Superfeet Blue Capsule orthotic footbeds. Improved performance guaranteed claim the manufacturers.



Derryck Draper