

Wool turns greener

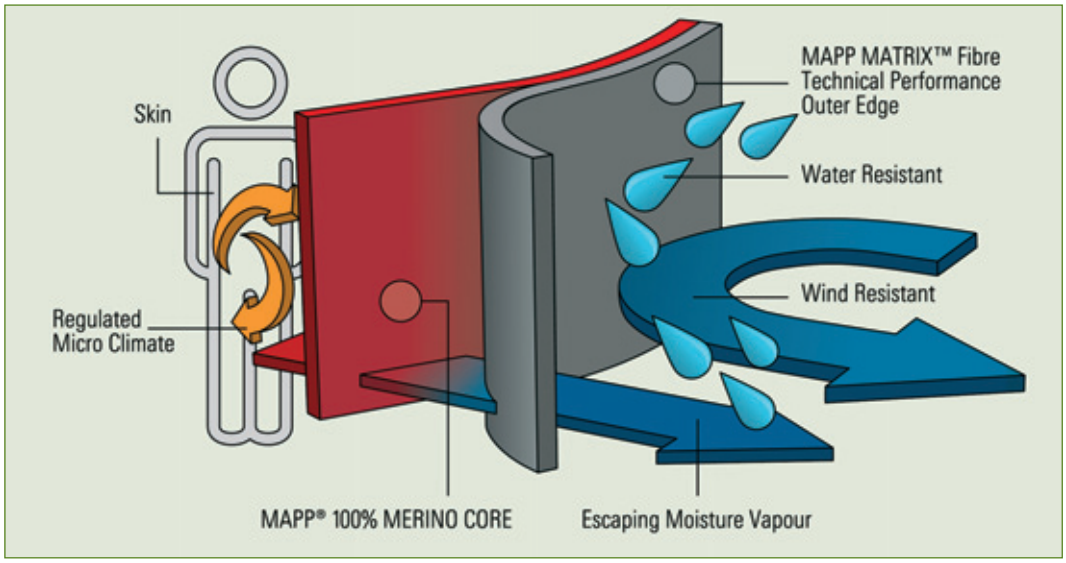
The now well-established trend towards sustainability and eco-friendly products is here to stay. Governments, consumers and manufacturers are now coming to terms with the fact that unless we, as a race, take serious steps to protect our planet, there will be no planet left for us to protect. And this frightening scenario has hit home particularly hard in the sports and outdoor industries as, although some sectors could continue to profit in a barren wasteland, for the wide ranging sports and activewear sectors the depletion of the environment will destroy the very arena in which their products are used, thus leading to their demise. As a result of the imminent threat caused by climate change and environmental damage there has been a general move towards more sustainable goods and production processes in the sports and outdoor industries over the past couple of years, and this has led to a resurgence in the use of natural fibres, with wool leading the way.

Although wool is already a natural, sustainable, recyclable fibre, producers are seeking new 'greener' ways to add more technical properties to it. As well as its many other collaborations Australian Wool Innovation (AWI) has undertaken in order to improve the technical attributes of Merino wool, it has also launched Merino Sorona, blending Australian Merino with DuPont's bio-based PTT material Sorona, derived mainly from corn, in a 50/50 mix suitable for knitted outdoor and workwear garments including socks, base layers, uniforms, and knitted pullovers. DuPont's 'green' technology converts corn into a polymer based on 1.3 propanediol, which has a kinked molecular structure not dissimilar to the natural crimp found in Merino, to produce lightweight eco-friendly soft yarns that are quick drying, stain resistant and easily-dyeable, and which offer warmth and protection, bulk and a high level of stretch and recovery.

Merino

Designer wool

Meanwhile, another Antipodean company, New Zealand–based Designer Textiles International, and its Merino Advanced Performance Programme (MAPP), is also working hard to develop new technically-advanced eco-friendly fabrics using Merino, developed to enhance the fibre's natural properties. These include Merino with a showerproof finish, UV protection, and specific base-layer Merino fabrics with a flame retardant finish for extreme end-use requirements in industrial workwear and military applications which enhances the Merino's natural flame retardancy. MAPP has also developed a selection



MAPP Matrix fabric incorporates an inner base-layer of MAPP Merino, with a protective outer-layer of technical performance fabric to produce a naturally hydrophobic interior and a breathable, hydrophobic exterior.

Mapp

of 100% natural Merino fabrics with a high visibility 'fluro' dyestuff finish, which conforms to global standards for high visibility apparel for performance sportswear and industrial workwear. The company also recently launched a new range of technical fabrics designed with a performance edge, MAPP Matrix, which assists in balancing the wearer's core body temperature and provides protection and comfort in competitive, extreme conditions. MAPP Matrix fabric incorporates an inner base-layer of 100% MAPP Merino, with a protective outer-layer of technical performance fabric to produce a naturally hydrophobic interior with the Merino and a breathable, hydrophobic exterior. However, whilst MAPP continues to develop new fabrics to enhance the technical characteristics of Merino fabrics, it is now focusing its attention on the environmental-friendliness of New Zealand Merino in order to ensure wool's future in the garment industry and to protect the fragile eco-system.

Back to nature

It has launched the Zque accreditation system, which is said to be "the world's first traceable value chain that combines exceptional quality New Zealand Merino in an accreditation programme that ensures environmental, social and economic sustainability, animal welfare and traceability" and is designed to provide complete transparency in the supply chain from the grower right through to the finished garment.

Through Zque, MAPP can assure the quality and the production processes used in the production and processing of its New Zealand Merino. The programme only accredits free-range farming systems that are committed to animal welfare, environmental responsibility and sustainability in their management practices, which are audited by an independent third party to guarantee transparency and traceability. MAPP is therefore one of the organisations leading the way in ensuring that Merino wool and natural fibres are produced in a environmentally responsible way thus shaping the future for a sustainable textiles industry, the importance of which cannot be underestimated.

Focusing on the future

Even the United Nations General Assembly is now focusing on natural fibres as the future for textiles and has gone as far as to declare 2009 the International Year of Natural Fibres (IYNF). In an attempt to promote sustainability and move away from synthetic products that require pollution causing production, the aim of the IYNF will be to develop the efficiency and sustainability of the world's agricultural industries thus contributing to food security and economic development opportunities. It is also hoped that it will raise consumer awareness of natural fibres in the world economy as well as within the textile sector thus strengthening demand for natural fibre products in order to improve the livelihoods of farmers and protect the environment.

The wide range of natural fibres including wool, jute, cotton, flax, silk, sisal, and coconut fibre will be highlighted through the project—co-ordinated by the Food and Agriculture Organization of the United Nations (FAO)—and will include fashion shows, exhibitions, conferences, TV documentaries and books. Whilst it will be the Brussels-based International Wool Textile Organisation (IWTO) that will represent the wool and animal hair sector on the steering committee of the initiative, MAPP's accreditation system and AWI's bio-based developments fit well with the UN initiative of promoting sustainable natural wool fibres in textiles. Increasing consumer awareness of sustainability and the ever-improving fabrics being developed using wool in combination with the latest technology make the perfect blend for creating a sustainable future for performance apparel and the planet itself.