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# Selling trekking poles

**A**mazing things, knees. They carry us around day after day, year after year, without complaining... until you accidentally trip over the dog or slip off the treadmill at gym. But that doesn't mean we should take them for granted. Watching out for snoozing pets is clearly a good idea. And hikers, who place their knees under greater-than-normal strain thanks to those heavy packs and steep downhills, can also benefit by using a pair of trekking poles.

But do they really make a difference? Aren't walking sticks just for old people?

## Benefits

**Lighten load:** "Studies have shown that trekking poles take 20-30% of the load off your legs," says Simon Larsen of RAM Mountaineering, importers of the Black Diamond range of poles.

So, for example, if you weigh 70kg and are carrying a 20kg backpack, that's a total load of 90kg on your knees. A 30% reduction – some 30kg – per step, multiplied by the thousands of steps you take over the course of hiking the Otter Trail equates to many tonnes. "That's a meaningful saving."

**Stability:** Another big plus of trekking poles is the extra stability they offer when crossing slippery or uneven terrain. With two more points of contact with the ground, there's less chance of injury caused by an unexpected slip.

**Adjustable:** Perhaps the biggest thing that distinguishes a trekking pole from grandma's walking stick is that it's height adjustable. The segments open up telescopically and are locked in place by either an expansion or clip-lock system (more on this shortly).

Why is this important? Several reasons.

- Firstly, the correct position to hold a trekking pole is with your elbow at 90 degrees. Being able to customize the height ensures that both Victor Matfield and Bilbo Baggins can enjoy a comfortable walking position.
- Some hikers also like to adjust the pole to suit the trail, increasing the length on steep downhills and reducing it on the ups.
- Finally, when the pole isn't in use, it's useful to be able to fold it right down. This way it's easier to attach to your backpack or stash in your luggage.

So, those are the main benefits of trekking poles. Now let's take a look at how to sell them to the customer.

## Key points to discuss

**One pole or two?** Although trekking poles are almost always sold as singles, this doesn't mean that they are meant to be used this way. "To get the full benefit for both knees you need to

## Our series to assist retailers with product knowledge

Words: MARK JOHNSTON. Compiled with the help of Simon Larsen of Ram Mountaineering; Bruce Woodroffe of Awesome Tools; Andrew Gold of First Ascent; John Fontyn, Eiger Equipment.

Photo: Messe Friedrichshafen (OutDoor Show)



use two poles," explains Andrew Gold of First Ascent. "Walking with a single pole doesn't promote a balanced stride, and places more weight on one leg and one arm."

**Metal or carbon?** Just like bicycle frames, trekking poles are made from either aluminium or carbon. There are pros and cons to each.

- Carbon's two main drawcards are that it is lighter and has inherent shock-absorbing qualities (because it flexes slightly), making for a more comfy ride on the trail.
- The downside? It costs more than aluminium. And while strong, carbon also snaps rather spectacularly if misused, making aluminium a better choice for long, demanding treks.

**How many segments?** As already mentioned, trekking poles are made up of telescopic segments so that the height can be adjusted. You get poles that comprise two pieces, three pieces and four pieces. The greater this number, the smaller the pole can be packed down since the individual sections are obviously shorter. However, more segments introduces more joints, which add weight as well as potential failure points into the mix.

**Different tips – what to use when:** The tip is important because it's the part of the stick that's in contact with the ground.

- Tungsten carbide (a type of alloy) is the standard material used because it's more hardwearing than steel. However, terrains

vary and this doesn't always provide the best grip, which is why most manufacturers also supply a selection of other tips.

- Popular are the little hats, or *baskets*, that attach a few centimetres above the end of the pole and prevent it from sinking into soft surfaces, such as mud or snow.
- Some poles also come with a rubber foot, the so-called *tip protector*, that prevents unnecessary wear and tear when walking on hard surfaces, such as bedrock or concrete paving. These are also useful for protecting your backpack or luggage when transporting the pole.

**Extra features:** Like the Bluetooth kit or USB slot in a new car, trekking poles come with some extras that may entice the customer.

- Compasses mounted in the handles are quite popular,
- as are built-in shock absorbers for softening the ride.
- For photographers, some brands offer a universal camera mount that allows you to attach a camera or camcorder to the top of the pole and use it as a support for steadier shots.
- And one feature that's found exclusively on Awetech poles, imported by Awesome Tools, is a multifunction yoke that can be screwed into the handle and used to support a large lens or hunting rifle. "Sure, it's not as secure as a regular tripod," says Awesome Tool's Bruce Woodroffe. "But it's much lighter and you can use it to walk."

### The locking system – internal or external?

Different brands have different names for the joints that hold the segments together (e.g. Power Lock, SpeedLock), but ultimately there are just two main types: those that use an internal expansion joint, and those that use some sort of external clip.

Which is better? It depends.

- Most people agree that Black Diamond's FlickLock external clips are bombproof, both reliable and easy to maintain. But you pay a premium for poles that are fitted with this system. And while the cheaper expansion-style joints are known to give problems, this system is still tried and trusted by several of the world's top trekking pole manufacturers. Ultimately it boils down to our final discussion point, price.

**How much should they spend?** It's true that one of the most common reasons for trekking pole returns is the joints failing. Either they break outright, or the joint becomes loose and the segments slip under load. While the cause is often *driver error* – either the customer applied too much force to the pole, or allowed mud and grit to get into the joints and wear them out (which is why it's important to keep **To p48**

# What's so smart about textiles?

**It's no longer Big Brother watching you... it's your clothes! Fabrics that entertain you, provide light, heat and monitor your health are no longer science-fiction. They are called "Smart Textiles", reports CARIN HARDISTY**

**S**mart textiles refers to everything that the consumer perceives as smart. This can relate to electronics woven into fabric, the use of smart materials (for example those that have a shape memory), functional finishes (for example no-iron finishing), or functional clothing (for example Gore-Tex), explains Julian Eichhoff, who presented a talk, *Smart Textiles: Creating added value to textile products*, at this year's OutDoor Show.

## Electronics in textiles

Think the scope of electronics in textiles stop with the integration of your iPod into your favourite hoody? Not so.

The integration of electronics into the fabric itself has come quite a way in recent years. To start with, electronic wires were simply sewn into the fabric. Now, the wires, etc. needed for the electronics to operate are part of the fabric itself. Fibres coated with iron are woven together in the textile itself and these fibres make the connected electronic equipment function. However, we still need external elements, for example battery packs, that cannot yet be integrated into the fabric. Scientists working on these textiles hope to one day be able to integrate everything into the fabric itself.

It is not yet possible to create all electronic components out of textiles, but there are some advances in integrating electronic boards with textiles. Scientists have created circuit boards that can stretch as needed, by weaving the circuit wires out of textile fibres and putting the board in a plastic container that stretches. This makes it possible to move with the fabric.

Scientists can create whole keypads out of smart fibres. This is not simply a plastic button with the electronics inside it; the keypad itself is textile that responds to the user's touch and does the coinciding function.

## Heating

By forcing current through wires attached to the textile it can be heated with electricity.

Electrical current is forced through a conductor that has high resistance, which creates heating. Conductive material can be applied by weaving, knitting, stitching, printing and coating it to the textile.

Depending on the placement of the wires carrying the current, it is possible to heat up

Scientists are developing smart textiles that can monitor heart rate, temperature, respiration and the body's fluid content.

the entire area of the textile, or to heat specific focused areas.

The current, however, needs power and this still requires an external battery pack, which is an added weight and therefore not too practical in every day use.

## Lighting

There are currently various possibilities being developed to light up textiles by making use of LEDs.

One is by mounting a LED onto the textile. This is done by weaving fibres that conduct the electricity into the textile and connecting them to the LED. These LEDs can be arranged to create patterns, spell out words, etc. that create a brilliant effect.

Optical fibres can also be woven to create a glowing garment, etc. However these still need a power source that is connected to them in one form or another.

## Monitoring bodily statistics

Smart textiles aren't just for useful gimmicks. They can also be used to monitor athletes. Scientists are developing smart textiles that can monitor heart rate, temperature, respiration and the body's fluid content.

The sensors are woven from iron-coated fibres, making them textile electrodes. This means the fabric itself is doing the work. They are comfortable to wear, can be positioned easily and knitting them into textiles is done during production, not afterwards.

Certain companies are also working on smart textiles that could save the wearer's life. For example a firefighter's jacket that has a textile temperature sensor that lights up when the area around the wearer is too hot.

## Equipment safety

Think smart textiles are just for clothing? Think again.

By incorporating textile sensors into ropes, these sensors can monitor the breakage levels, load levels, load history and wear abrasion. Therefore, they can warn before the rope



Julian Eichhoff, Head of the research group for smart textiles at the Institute für Textilechnik at the RWTH Aachen University in Germany, gave a lecture on the possible practical applications of smart textiles at the OutDoor Show in Friedrichshafen.

breaks – pretty handy for safety and climbing ropes, parachute lines, mooring ropes, etc.

A miniaturised measuring system is embedded inside the rope and has a thread-like sensor running through the length of the rope that measures abrasion, etc.

When tests were done on parachute ropes, they found that this sensor reduced maintenance time from two hours down to ten minutes.

## Controls

Textiles and technology are moving closer together with each passing year. Eichhoff sees a future where technology is transferred to the actual textile and you don't have dials, etc. on the textile – the textile itself does the work.

Ways are being developed that will allow you to incorporate controls in your garment, etc. These include textile switches, an intuitive control system using fabric folds and proximity and touch sensors.

These can be incorporated into anything that uses textile at some point in its design, for example opening a car's electronic window by placing your finger on the fabric area on the inside of the door, or operating a remote that is on a pillow that has the textile switches.

The possibilities for the use of smart textiles are endless and are currently only limited by how fast scientists can come up with ideas and make them work.

## Trekking poles (from p47)

trekking poles clean!) — there's no doubt that quality also plays a role. As with most things in life, you get what you pay for, so if somebody walks into the shop and says they're planning a serious trek to the Himalayas, then it makes sense to guide them to the more expensive models.

However, Bob and Doris who come in and say they want something for walking the dogs on Sundays can obviously get away with something cheaper.