

OUTDOORS

KIT OF THE WEEK



A new edition of the popular Ultimate UK Cycle Route Planner has been published.

The map guide features more than 20,000 miles of leisure cycling routes in a "crisper, clearer format".

It now includes National Cycle Network numbering and places of interest next to cycle routes.

If you are planning a cycle tour or long-distance bike ride this year, the route planner is a great resource.

Buy from www.amazon.co.uk for £9.95.



Fans of lightweight, super-cushioned Hoka One One footwear will be delighted to hear about an updated Challenger ATR 2 shoe.

For 2016, the Challenger ATR 2 has a more supportive fit through the midfoot and increased comfort across the top of the foot.

The "early stage Meta-Rocker" remains unchanged to provide a smooth run, while the 4mm lugs give all-terrain traction.

This means the versatile shoes, weighing from just 220g, can be worn on road or trail.

The Challengers come in male and female specific fit and cost £100. See hokaoneone.com

OVERCOMING OBSTACLES

The Total Warrior obstacle race returns to East Lothian this year.

The event, on September 10 and 11, includes 30 obstacles – including fire, ice, electricity and mountains of mud – over a 12km course.

It's estimated more than 5000 people will tackle the course at the Balgone Estate, North Berwick.

Event director David Gaffney said: "It's the perfect location. It has hills, water, woods, sea views and an abundance of mud – and that's all before we've even started building our world-renowned obstacles."

See www.totalwarrior.co.uk

Historic trigs of the trade



PICTURE Ed Fielden

WORTH BAGGING
A trig pillar on Shetland



FIONA RUSSELL

April 18 is the 80th anniversary of the trig pillar in the UK – so here's all you need to know if you want to join in the celebration of these beacons on our landscape

What is it?

On April 18, 1936, the first trig – triangulation – pillar was installed by mapping agency Ordnance Survey.

Some 6500 trig pillars were used to measure the shape of the land and to rewrite the map of Britain.

While trig pillars are now a common part of the British scenery, in the 30s they formed a state-of-the-art network.

This year, OS are encouraging more people to appreciate the trig by walking, cycling or running to the pillars.

Tell me more:

The basis of a triangulation system is a mathematical process that makes accurate map-making possible.

OS spokeswoman Gemma Nelson said: "Triangulation works by determining the location of a point by measuring angles to it from known points at either end of a fixed baseline."

"For OS maps, the known points were the thousands of trig pillars erected across the country."

"A theodolite was secured to the top mounting plate of a pillar so that angles could then be measured from the pillar to other surrounding points."

It took many angle measurements to gain the most accurate primary points in the retriangulation and observations often took several hours at each pillar.

In total, the retriangulation task took 26 years, with a break for World War II.

The OS maps that many of us use are based on this retriangulation process,



MAKING MAPS A surveyor uses a beacon lamp on top of a trig pillar

although today any new measurements are done by GPS.

Anything else to know?

Last month it was announced that the UK's tallest mountain, Ben Nevis, had been re-measured. The new OS calculation revealed it is 1345m, rather than the previously thought 1344m.

When the Ben was last surveyed 67 years ago, it took a team of seven surveyors 20 nights to obtain their calculations.

They had to lug hundreds of pounds of kit to the top of the mountain – and to surrounding mountains – to do so.

They also had to wait till night to survey because strong lights were shone from the trig pillars of the other mountains on to Ben Nevis to allow the data to be recorded.

Today, three surveyors used a geodetic survey grade GPS receiver for two hours to record a constant data communication with satellites orbiting the earth.

Surveyors were amazed by how accurate the triangulation measurement had been in 1949.

How can I get involved?

Why not bag a few trig pillars?

It's thought about 6000 accessible pillars remain across Britain. Thousands are located in Scotland, many on hill and mountain tops.

You can identify the trig pillar locations by looking on OS maps for a small blue triangle with a dot in the middle.

Six trigs to bag:

- On a fine day the hike to the trig pillar on the summit of Ben Nevis is hard to beat.
- There is a well-positioned trig atop Ben Lomond.
- Doughnot Hill in the Kilpatrick's near Dumbarton offers a lovely half-day hike.
- Barr Mor, on Lismore Island, has an elevation of just 127m.
- Mount Keen in the Grampians is the most easterly Munro.
- Tinto Hill, near Biggar, offers a great walking or running route.

Find out more:

- www.trigpointing.co.uk
- www.haroldstreet.org.uk/trigpoints
- www.ordnancesurvey.co.uk/getoutside

Advice and ideas

Join me on my adventures in Scotland's great outdoors by checking out my award-winning website at www.fionaoutdoors.co.uk – you'll find lots of great information about walking, cycling, running and other outdoor activities as well as kit reviews.