



The Transantarctics, backbone of the continent, have fascinated explorers since James Cook's time.

GEOLOGY

High on Antarctica

Gabrielle Walker enjoys a historic exploration of the frozen continent's great mountain range.

Think of Antarctica and you don't immediately think of mountains. Almost all the attention given to the continent focuses either on the charismatic animals that patrol its periphery or the two vast sheets of ice that drape its interior. Geologist Edmund Stump has taken a fresh tack.

In *The Roof at the Bottom of the World*, he follows the great range of mountains known as the Transantarctics. These run through the centre of the continent: a backbone between the two ice sheets. Many of the Transantarctic peaks are fully submerged in ice, but some hold enough of it at bay to preside over rare 'dry' valleys and bare outcrops of rock.

Stump has made studying these mountains his life's work. However, in this book he relates not his own geological studies, but the history of the Transantarctics' discovery, from their earliest sighting by James Cook in the eighteenth century through the heroic age of Antarctic exploration and on to the great era of Antarctic science. Thanks to the stunning photographs — many by the author — this solid and dependable book is as beautiful as the mountains it describes.

Stump begins at the northern end of the range, the first to be sighted, and traces the history inland. This makes for some odd chronologies. We read, for example, that the exploring party of Lieutenant Victor Campbell (a member of Robert Falcon Scott's expedition) was dismayed, on returning to base in 1912,

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to discover Scott's terrible fate — more than a chapter before Scott himself departs on his disastrous journey to the South Pole.

However, the benefit of making the mountains the focus is that it enables Stump to dwell on the unsung heroes. These were the less glamorous exploring parties that went off east and west when most eyes were on the south. They had their share of adventure, disaster and reward, but their exploits were often overshadowed. Campbell's party, for example, became stranded in Terra Nova Bay in winter with minimal rations and half-shredded tents, and ended up living through months of darkness and cold in a dismal snow cave lined with seaweed.

Stump's telling of these tales is competent, accurate and frequently vivid, and he has a good instinct for when to quote from the diaries of the men who discovered, mapped and explored these mysterious mountains. "It falls to the lot of few men to view land not previously seen by human eyes," Ernest Shackleton wrote in his diary in 1908, "and it was with feelings of keen curiosity, not unmingled with awe, that we watched the new mountains rise from the great unknown that lay ahead of us."

And although I couldn't help but wish



The Roof at the Bottom of the World: Discovering the Transantarctic Mountains
EDMUND STUMP
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£25

that Stump had included some of his own scientific findings in the book, I enjoyed the occasional sidebars in which he recounts journeys through mountains he clearly loves. He speaks of becoming aware of the silence "behind me, just at my shoulder", of his delight at exploring a hidden ice cave, of how it felt ascending (by helicopter and then snowmobile) a hitherto untouched mountain. Like Shackleton, Stump was enchanted by the prospect of seeing something no human had ever witnessed.

In the end, it is the human tales that most interest Stump. He delights in showing recent photographs alongside those taken from the same spot decades earlier. These paired pictures are marvellous, a reminder of how patient this continent is, and how little it has changed over the time that we have observed it.

Stump also writes of how, after many field seasons in the Transantarctic mountains, the thrill of being first in a spot faded, to be replaced by the thrill of knowing that he was standing exactly where members of a previous party had stood. Sometimes he even diverted a trek to find a cairn left behind by an earlier expedition, to prise out the carefully balanced stone that hid the messages left inside, extract the paper like a treasure map, read it, fold it, replace it and add a note of his own.

I have met many other scientists working in Antarctica who show a similar reverence for such traces. The artefacts' state of preservation is part of the fascination — a reminder that the age of exploration was not so very long ago, and that the bond to these first heroes is more palpable here than anywhere else on Earth. Towards the end of the book, Stump's sidebars become philosophical on this point. He describes how he was enchanted to find some rusted cans in a far-off outpost, and then disgusted when he found two more sets. Where, he asks, does history end and pollution begin?

Many of the photos and maps in the book tread a similar fine line between connection and desecration, overdrawn as they are with coloured traces showing the routes where explorers planted their feet, sledge runners and then tractors and planes on this alien landscape. Rather to my surprise, I liked this.

Stump's focus on the human diminishes neither the photographs nor the stories. Instead, it gives us a reassuring handhold when faced with overwhelming grandeur. After all, our explorations of Antarctica may have told us a great deal about the snow, ice and rocks we have found there, but they have taught us even more about ourselves. ■

Gabrielle Walker is a writer based in London. Her book *Antarctica* will be published in March 2012 by Bloomsbury. e-mail: gw@gabriellewalker.com