

thousands of years. In Wright Valley, the central of the three valleys, the longest river in Antarctica, the Onyx, flows inland to Lake Vanda. The lake reaches temperatures of 25°C, despite being ice covered. The only vegetation is algae and lichens, including endolithic species, and bizarre mummified seals, some hundreds of years old, lie kilometres inland. The geology is unusual and complex, and the valleys are the nearest place on Earth to conditions found on Mars. From the late 1960s the dry valleys have been the subject of a huge amount of scientific research. This was not the case in the summer of 1958–1959.

In that year, Colin Bull, a lecturer in physics, and three companions, Peter Webb and Barrie McKelvey, both 3rd year geology students, and Dick Barwick, a biology lecturer, mounted a two month expedition to Wright Valley, then unnamed and unvisited. It was an adventure with plenty of geographical and scientific research, a lot of hard going and hard work in harsh conditions and plenty of fun. This was at a time when it was still possible to go to Antarctica and easily carry out fruitful research on a shoestring. It could not happen nowadays.

Bull had participated in the Birmingham University Expedition to Spitsbergen in 1951 and then the British North Greenland Expedition, 1952–1954. He was invited to join the Commonwealth Trans-Antarctic Expedition but had just become engaged. So he went to New Zealand as a senior physics lecturer at Victoria University of Wellington. While listening to Webb and McKelvey talking about their recent visit to Antarctica, he realised that it might be possible to make a short visit himself. He had seen aerial photos of the dry valleys and chose the unnamed valley as his venue. Barwick, who had also worked in Antarctica, completed the team. They enlisted the enthusiastic support of Bob Clark, the Professor of Geology, and set about raising funds and gathering equipment. A novel approach was to place £1 from the Lord Mayor's donation on a horse in the Derby. It won at 40 to 1. And an anorak, a veteran of the Trans-Antarctic Expedition, was retrieved from the rubbish dump at Scott Base and made serviceable. The expedition cost less than \$1000 but this is somewhat misleading. Travel to McMurdo Sound and flights out to the Wright Valley were free of charge.

After two weeks at McMurdo and Scott bases, the four men were deposited in the Wright Valley. They spent 52 days exploring this valley. Their main base was close to Lake Vanda (named after one of Bull's Greenland dogs to alliterate with nearby Lakes Vida and Vashka named after two of Scott's dogs) and they traversed Bull Pass to reach the McKelvey and Barwick Valleys to reveal some of the secrets of this amazing place. It was hard work, climbing mountains to survey the surrounding country, carrying or dragging huge loads of equipment over difficult terrain and suffering drift sand.

Surveying was a major part of the programme, together with geology and biology. The geology proved complicated and hard to interpret. The biology was limited, thieving skuas and some obscure and virtually microscopic life forms. *Innocents in the dry valleys* is an account of the expedition rather than a description of the field programmes and the results they obtained. That the programmes were successful is shown by the list of 17 scientific papers derived from the seven week, four man expedition. From this expedition sprang a series of 50 annual expeditions from Victoria University of Wellington and the dry valleys are now the most intensively studied area of the Antarctic continent, with over 2000 scientific papers published.

I would have liked to have seen a summary of the expedition's scientific results followed by a brief *resumé* of 50 years' subsequent research in the valleys to put their pioneering efforts into perspective, although Bull considered this to be impracticable. However, he mentions finding fossils of the mollusc *Pecten* (scallop) far inland. The team were divided on their origin but we do not hear the definitive conclusion. Barwick, the biologist, was interested in the mummified crabeater seals (together with a few Weddell seals and some Adélie penguins) also found many kilometres inland. What were they doing there? 'Odd bit of weathering', thought Bull, tossing away a piece of sandstone with a dark line, thereby missing 'yet another important discovery'. A decade later this was found to be caused by endolithic bacteria. They narrowly missed taking the bottom temperature of ice-covered Lake Vanda, discovered a year or so later to be so amazingly hot.

Before Bull's visit nearly every expedition to Antarctica had been a national expedition, like Scott's or a large private expedition, like Shackleton's. The Kohl-Larsen and Carse expeditions to South Georgia are more like Bull's, especially in the way that they were able to overcome the major problem of reaching their destinations by cadding lifts.

Bull dedicates the book to his 'uncomplaining, contubernial accomplices'. A note helpfully explains that 'contubernial' means sharing the same tent. Although now retired, he has written the book with the same enthusiasm and humour that made the expedition such a success. It reminds me of Thomas Bagshawe's *Two men in the Antarctic*, in which two young men mitigate the rigours of life in unpleasant conditions through their sense of humour. It harks back to a time when working in Antarctica could still be an adventure and the simplest observations could reveal something new to science.

All in all, *Innocents in the dry valleys* is a very enjoyable 'read' and makes a change from accounts of yet another ski jaunt to the South Pole. It is enhanced by maps, a glossary, an explanation of place-names and a detailed index. (Robert Burton, 63 Common Lane, Hemingford Abbots, Huntingdon PE28 9AW.)

WHALES' BONES OF GERMANY, AUSTRIA, CZECH REPUBLIC AND SWITZERLAND. Nicholas Redman. 2009. Teddington: Redman Publishing. 205 p. illustrated, hard cover. ISBN 978-095458002-5. Available only from the author. Enquiries to nick.redman@hotmail.com. £35.
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This is the second volume of a series which will eventually cover the whole of Europe as well as the USA and Australasia

and maintains the high standard of the author's *Whales' bones of the British Isles* (Redman 2004) as regards both the depth of research and quality of production.

The documentation of whale remains in Germany extends so much further back in time than anywhere else and the earliest reference revealed by the author concerns whale bones hung from the fortifications of the Baltic port of Lubeck in 1336. Then in 1365, following the stranding of a whale at Damerow (island of Usedom), the Duke of Pomerania sent the jaws and some of the ribs to be hung in churches at Wittenberg., Brandenburg, Stralsund and Stettin, an act which emphasises

the totemic quality of cetacean remains and man's fascination with these giants of the sea. Sometimes a stranding or the accidental discovery of bones would be regarded as a portent of evil and this probably explains the frequency with which ribs and miscellaneous bones were brought to a church, to purge them of any malevolent powers. They were often thought to be the remains of a mythical monster, a dragon, or of a vanished race of giants which made them objects which could amaze both high and low, and an essential component of every prince's *wunderkammer*.

Germany also gives us the first example in history of the 'touring' whale when an entrepreneur displayed the mounted skeleton of a whale washed ashore at the mouth of the Rhône. Starting in 1620 it was shown in Augsburg, Nürnberg and Strasbourg before being dismantled in 1625 and the pieces sold off. A contemporary print to advertise the attraction is the earliest representation of an articulated skeleton.

In the eighteenth century with an abundant supply of bones from an expanding European whale industry whale bone arches became popular and whale shoulder blades were hung up as shop and inn signs, some of them beautifully painted. Especially on the island of Föhr in Schleswig Holstein, once home to many whalers, bones were commonly used for a variety of practical purposes, to support the winch for a well bucket, in rows to form a fence or boundary, and, uniquely, sandstone headstones were bolted to jawbones set up in the churchyard. Another survival there is a row of cut down jaw bones forming the wall of a pig sty. In Hamburg a pair of jaw bones formed part of the equipment of a ropery.

Of special note from earlier times is a vertebra known as Martin Luther's footstool. This is first noted in 1574 and is

displayed in the Luther-Zimmer in the Wartburg at Eisenach where he made the first full translation of the New Testament into German.

In the other countries the author mainly records whale skeletons of more modern vintage displayed in museums and universities but there are a few surprises from these landlocked nations. In the Czech Republic a jaw bone, rib and scapula in the church of St. Frantisek Serafinsky at Golcuv-Jenikov, serves to remind us of the significance with which these relics were once endowed; they were brought by General Martin Goltz from Stralsund as booty of the Thirty Years War. In Austria part of one of the bones which formed an arch outside the Restaurant zum Walfisch in the Prater, Vienna, is still preserved and a whale rib of unknown origin hangs in the passageway leading to the Universitätsplatz, Salzburg. Rapperswil, Switzerland, was the home of Jerg Zimmerman who arranged the touring of the whale skeleton in the early seventeenth as described above.

This informative and well illustrated volume provides interest for the anthropologist, folklorist, social historian, zoologist and anyone who enjoys exploring the story of the cetacean tribe and the wonder it has generated amongst mankind over countless generations. It is completed by a bibliography, index of place names and people, index of categories of whalebone and location maps. (Arthur G. Credland, 10 The Greenway, Anlaby Park, Hull HU4 6XH).

Reference

Redman, N. 2004. *Whales' bones of the British Isles*. Teddington: Redman Publishing.

HOKKAIDO: A HISTORY OF ETHNIC TRANSITION AND DEVELOPMENT ON JAPAN'S NORTHERN ISLAND. Ann B. Irish. 2009. Jefferson, North Carolina and London: McFarland and Company. vii + 370 p, illustrated, soft cover. ISBN 978-0-7864-4449-6. US\$55.

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The polar regions are, of course, extremely difficult to define. This reviewer was once informed by a *doyen*, now sadly deceased, of polar studies that a simple rule of thumb was that they included anywhere where the sea froze. That is sufficient justification for inserting brief notice of this book in *Polar Record*, because the sea on the northern coasts of Hokkaido, Japan's northernmost island, most definitely does freeze each winter as indeed it does frequently on the other coasts as well. Add to this the prodigious snowfall that the island experiences and we have a double justification for inclusion.

A third reason is that there are very few works in English, and certainly none as accessible as is the present volume, on the island in question. Part of the reason for this might be that Hokkaido is a borderland in the strict sense of the word adjacent as it is to Russia to the north. Moreover while ethnic Japanese people, or Wajin, have lived on the country's other three main

islands, Honshu, Kyushu, and Shikoku, for many centuries, they only started serious immigration into Hokkaido in the latter half of the nineteenth century.

This book tells the story of Japan's aboriginal people, the Ainu, followed by that of foreign explorers and ethnic Japanese pioneers. The book pays close attention to the Japanese-Russian disputes over the island, including cold war confrontations and more recent clashes over fishing rights and over the once Hokkaido-administered islands (the southern parts of the Kuril chain and Karafuto, southern Sakhalin) seized by the U.S.S.R. in 1945.

The author is absolutely open about the fact that her ability in the Japanese language is limited and that the book depends largely on English language sources. This is, of course, a disadvantage as is the lack of engagement with Russian sources but her diligence in unearthing almost anything written in English about Hokkaido and the surrounding areas has been remarkable. The bibliography is a testament to the amount of sheer hard work that she has invested in this book. Moreover the writer's style is pleasant and easy to read. The result is a wholly satisfactory compilation, slanted obviously by the restricted nature of the sources, but one that presents a convincing portrayal of Hokkaido from the nineteenth century onwards. It is warmly recommended. (Ian R. Stone, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER.)