

Exhibition

Force of nature

The photograph shown here, called *Forces #7*, is one of a series staged and shot by New York-based artist Sonja Braas. Braas is interested in the way that we perceive our natural environment, particularly those uninhabitable landscapes where danger is a counterpart to beauty. For the *Forces* series she built models depicting the raw violence of nature. Once Braas had photographed the models, she destroyed them.

Forces #7 is a compelling, ambiguous image, with a reality that becomes less clear the more closely one looks. It reflects the fading of the romantic notion that parts of nature will always remain pristine and inaccessible to humans.

Some of the *Forces* series can be seen at the Tanit Gallery in Munich, Germany, from 6 November to 13 December 2003. **Alison Abbott**



prey, and parasite and host). But do such trophic interactions provide a general explanation of population cycles? In my view, much more work (involving all elements of the research programme advocated by Turchin) is needed to settle this question.

Turchin claims that ecology has become a mature science, but I think it is still maturing, and as such is all the more exciting to work in — it is during the maturing stages of any life cycle that the interesting developments happen. I am quite sure that Elton and the group around him in the Bureau of Animal Population, which he set up at Oxford University, would have agreed and been happy about the development of what they started three-quarters of a century ago. ■

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Rambling in the rain

The Cruise of the Betsey with Rambles of a Geologist

by Hugh Miller, with a preface by T. C. Smout and an introduction and notes by M. A. Taylor
National Museums of Scotland: 2003.
576 pp. £20

Philippe Janvier

It is rather unusual to find poems, folklore and polemic in the same book as an analysis of the structure of the scales from 370-million-year-old lobe-finned fishes. But Hugh Miller's *The Cruise of the Betsey with*

Rambles of a Geologist contains both. It is rather disconcerting at first but it soon becomes fascinating once you imagine you are making your way with the author, who passes from one topic to another according to either the area he's visiting or an incidental encounter with a curio of nature.

The Cruise of the Betsey is mainly an account of Miller's geological and journalistic exploration of the Scottish isles of Eigg, Rum and Skye in 1844 and 1845; *Rambles of a Geologist* relates to voyages he made in the late 1840s through Scotland to Caithness and Orkney in search of geological and palaeontological outcrops. The two texts were first put together in 1857 by Miller's wife, Lydia Fraser, after his suicide in 1856. This new edition is enriched with a foreword by T. C. Smout, Scotland's historiographer royal, and with a detailed and informative introduction by M. A. Taylor, a palaeontologist at the National Museums of Scotland. It also contains a geological timetable, a glossary, notes and an index, although there is no simplified geological map of the areas being considered.

Miller was a self-taught man. As a young stonemason he became fascinated by the fossils he found around his native town of Cromarty in Scotland, especially the Devonian (470-million-year-old) fish and Jurassic (150 million-year-old) molluscs. In learning about geology and palaeontology he found no conflict between his Calvinist faith and the history of life told by the rocks. But by rejecting a literal reading of Genesis about the history of life on Earth, Miller helped to promote science within the strongly religious society of his time. He was a talented writer, and his books on this subject, *The*

Old Red Sandstone (1841), *Footprints of the Creator* (1849) and *Testimony of the Rocks* (1857), were successful in Victorian times.

Even so, Miller never adhered to the pre-darwinian evolutionary views of his time. To both Miller and his mentor, the palaeontologist Louis Agassiz, evolution, if it occurred at all, was merely a form of degeneration. In *The Cruise of the Betsey*, Miller rarely alludes to this; most of his scientific considerations are about geology, its bearings on our knowledge of the vastness of time, and its moral or physical benefits. Thanks to his popular style, this book has long increased people's interest in geology, hence the importance of this new edition.

Readers not from Scotland might have been lost in Miller's allusions to church and land politics without the book's excellent introduction. This explains that the Free Church of Scotland was created by the 'disruption', in which Miller played a role as the editor of the evangelical newspaper *The Witness*. The 'clearances' were a little-known (outside Scotland) form of 'soft' ethnic cleansing, which Miller condemned.

The diversity of subjects dealt with in this book is immense, including sociology, folklore, poetry, Gaelic language, archaeology, history, politics, religion, morality, zoology, geology, palaeontology and geography. This breadth makes it impossible to dissect the book into particular sections (as Taylor puts it, it is like trying to cut quicksilver). Yet Miller's style is clear and steady, with great care for detail. It variously recalls Walter Scott, Balzac and sometimes even Jules Verne. Although undoubtedly Victorian, Miller's English is remarkably easy to read for non-native anglophones.

Miller often alludes to rainy days ("another rainy day, varying only from the preceding day by the absence of wind"), so put on your boots and raincoat (or plaid) and just wander with him along the shore. Listen to him, inspired by a dead, tortured fish on the beach, considering the origin of moral evil, or, in a cave on Eigg, meditating over a sixteenth-century clan massacre, or explaining why Cromwell's helmet and Devonian fish scales were similarly fluted.

I warmly recommend this marvellously rambling book, which is full of sensitivity and poetry, to anyone who loves Scotland or is a humanist, a sociologist, an ethnologist, a geologist, a palaeontologist or just a fossil fan. ■

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More on Miller

Celebrating the Life and Times of Hugh Miller

edited by Lester Borley

Cromarty Arts Trust/Elphinstone Institute, University of Aberdeen, £13.50