with her second husband, played a significant role in establishing in 1926 the finest memorial of all to Scott, the Polar Research Institute in Cambridge, depositing in its archives 'heaps of *Discovery* papers and journals' and subsequently helping to secure the funds with which to raise the memorial building.

Kathleen died of leukaemia in 1947. G.M. Trevelyan, Master of Trinity College, Cambridge, in a eulogy spoke of her 'masculine spirit,' 'her open-eyed courage to realise and accept calamity and sorrow,' and 'her dislike of all forms of sentimentality, falsity, and feebleness.' Even more, one feels, would Kathleen's spirit have enjoyed her grandaughter's appraisal of her as one who 'took hold of her life with rare glee and raced through it without shame, without fear, and scarcely a backward look.' This is indeed a book to remember, a joy to read and a first-class piece of research hallmarked by an intelligent index. It may well not be the last 'life' of Kathleen, but it is difficult to see how it will be bettered. (H.G.R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

THE RUSSIAN FAR EAST: A HISTORY. J.J. Stephan. 1994. Stanford: Stanford University Press. xi + 481 p, illustrated, hard cover. ISBN 0-8047-2311-7. £35.00; US\$50.00.

J.J. Stephan is well known as the author of two books, published in the 1970s, which related to aspects of the Soviet far east: Sakhalin: a history and The Kurile Islands. These works covered fascinating and little known parts of the world that it was then virtually impossible for an outsider to visit. They were based on exceptionally deep scholarship covering widely scattered and clusive sources in several different languages, presented coherent and convincing conclusions, and, most unusually for serious historical works, were written in a clear and light manner, enlivened by the author's obvious relish for the ridiculous.

The gradual opening up of archives in the former Soviet Union will mean that comprehensive histories of the region will be written in the future. Stephan notes that, while preparing the present work, he did not have access to Soviet archives, and he claims it is a 'preliminary and perforce rudimentary sketch of the historical architecture of a region where Europe, Asia, and America come together.'

This reviewer suggests that the author is being unduly modest here and that the book is a veritable *tour de force* that will serve as a firm foundation for detailed studies of different aspects of the Russian far east for years to come.

After a brief chapter on the geography and prehistory of the region, which is defined in specific terms as 'the Priamur, the Primorye, the Okhotsk seaboard, Kamkatka, Chukotka, Sakhalin, and the Kurile Islands,' Stephan comments on the influence of the Chinese in the region before the advent of the Russians. He notes the changes in Soviet historiography of the period with the fluctuations in Soviet/Chinese relations.

The earlier chapters in the book, concerned with the arrival of the Russians and the period up to the Civil War, are masterly. Stephan tells a complex story with economy and concision and also within a very small compass in terms of numbers of pages. He draws attention specifically to the delicacy of Russia's relations with its neighbours in the area and refers to the status and position in society of other groups of peoples living within the defined area: the Chinese, the Japanese, the Koreans, and the indigenous peoples.

The author devotes relatively little attention to the Russo-Japanese War, although this was, of course, a central event in enhancing Japanese confidence when dealing with their neighbours, but his chapters on the precursors to the Russian Revolution, the Revolution itself, and its immediate aftermath to the end of the existence of the Far East Republic on 15 November 1922, provide an excellent outline of events and a basis for further work on these difficult episodes.

The Soviet period is covered in detail, but, of necessity, the account becomes somewhat more anecdotal in tone due to the relative paucity of sources upon which reliance can be placed. Stephan weaves the evidence together with skill and provides insights upon some obscure topics, such as the position of Japanese prisoners of war in the Soviet Union between 1945 and 1956, some of whom worked as far west as the Black Sea.

When referring to the collapse of the Soviet Union, he points out that one of the inevitable consequences was the mass emigration from the region by those whose sojourn there was either involuntary or under inducement of enhanced pay. According to Stephan, some of the settlements in the Magadan region are now virtually ghost towns.

The writer is cautiously optimistic about the future, and he cites examples of successful entrepreneurial activity in the region, most notably, of course, in Vladivostok. Considerable space is devoted to the question of regional autonomy, which has been a long-continued theme in the history of the Russian far east from early days, and the problems and possibilities are thoroughly rehearsed. Stephan's concluding sentence comments that 'the Far East may yet live up to a venerable sobriquet "Amur California," assuming that Russia can afford more radiant futures,' which is agreeably ambiguous but which points up the difficulties of prediction in the region.

For polar specialists, the book may disappoint, since very little attention is devoted to the specifically Arctic areas of the Russian far east. There is, however, a chapter simply entitled 'Kolyma,' a name that requires no parenthesis to recall the full awfulness of that episode in history. This includes an account of a relatively little-known incident: the visit of Franklin D. Roosevelt's Vice-President, Henry A. Wallace, to the area in 1944. This section is aptly entitled 'Innocents abroad.'

The text of the book covers 301 pages. It is followed by the most impressive critical apparatus that this reviewer has ever observed in an historical work. Counting the bibliography, this encompasses no fewer than 155 pages. It is destined to be a first point of reference for any scholar studying the region for years to come. There are 11 appendices, and some of them are considerable achievements in their own right. Appendix D, 'Biographical notes,' sets out details of the lives of some 220 persons referred to in the text. The entries for a depressing number of them end with the word 'shot,' possibly with the date of execution. But there are some curiosities here. Bering and Chirikov are omitted — presumably the author considered that they were well enough known — but Kreuzenstern is included, as is the eccentric Briton, John Dundas Cochrane, who walked across Russia in 1822–1823. A surprising omission is I. Ia. Gutman, who wrote the only detailed account of the Nikolaevsk incident of 1920.

Other appendices cover such subjects as 'Far eastern party secretaries, 1922–91,' 'Commissars of state security in the far east, 1922–53,' and 'Far eastern delegates to the 17th and 18th Party Congresses.' The last appendix may be the most immediately useful, since it is a compilation of alternative place names in the region, in the different languages, with their dates of currency.

There are comprehensive footnotes, collected together at the end of the book, and a full index. The illustrations are excellent. The maps are clear and the photographs have been carefully selected to illustrate the text.

To sum up: an excellent book, the first real history of the area in any language, compiled by an author who has immersed himself in the subject for decades. Yet, as was the case with Stephan's earlier books, it wears its scholarship lightly and is a pleasure to read; indeed, it is difficult to put down. It is highly recommended to all with interests in the region. (Ian R. Stone, The Registry, University of Kent at Canterbury, Canterbury, Kent CT2 7NZ.)

MARINE MAMMALS AND THE EXXON VALDEZ. Thomas R. Loughlin (Editor). 1994. San Diego and London: Academic Press. xix + 395 p, illustrated, hard cover. ISBN 0-12-456160-8. \$US49.95.

Just after midnight on 24 March 1989, the supertanker Exxon Valdez ran aground on Bligh Reef in Prince William Sound, about 40 km outside Port of Valdez in Alaska. Eight of the 11 cargo tanks were ruptured, and heavy, black crude oil began to spill out into the surrounding water. Within a few hours, an estimated 11 million gallons (258,000 barrels) had been lost, and oil continued to leak until the tanker's damaged tanks had been off-loaded several days later. The grounding of Exxon Valdez resulted in the largest oil spill in United States history.

It is estimated that supertankers like Exxon Valdez had successfully navigated the reefs and icebergs in Prince William Sound for 8700 separate journeys during a period of 12 years. However, although at least eight contingency plans were in place in the event of a disaster, none of them anticipated the scale of the Exxon Valdez spill. Necessarily, the ensuing clean-up operation was vast, and involved a large number of organisations, ranging from wildlife experts who assessed and attempted to protect sensitive

areas, to the flotilla of boats that was involved in the containment and collection of the oil.

As consumer demand for fossil fuels increases, and as more tanker traffic takes to the high seas, it is only a matter of time before another spill of equal or greater severity occurs. In 1993 the grounding of Braer in northern Scotland resulted in the loss of 84,000 metric tonnes of oil around the environmentally sensitive coastline, underlining the very real need for an efficient and rapid initial response to such disasters. Marine mammals and the Exxon Valdez is a summary of the response and natural resource damage assessment (NRDA) activities that were undertaken in relation to whales, seals, sea lions, and sea otters in the wake of the Exxon Valdez disaster. It describes plans that were developed to deal with the situation and summarises lessons that were learned. It is the hope of the editor, Thomas Loughlin, that Marine mammals and the Exxon Valdez will be of use to marine mammalogists when the next spill occurs, in order that damages to these animals and their habitats will be minimised.

The book comprises 21 chapters written by marine scientists involved either in the clean-up operation or in examining specimens and samples collected afterwards. The first chapter provides an overview of the disaster between March 1989 and the summer of 1992, when the clean-up operation was deemed to be completed. A geographical description of the area and its ocean currents is followed by a brief summary of the methods used to attempt to contain, clean, and retrieve oil from the shoreline. The chapter concludes with a diagrammatic representation of how the oil slick dispersed, the process of its degradation, the settlement agreement imposed on Exxon, and continued damage-assessment activities.

The second chapter is also general, and provides an overview of response activities, including a description of the regulatory framework for response (liberally scattered with an impressive collection of acronyms of the kind that usually accompany government agencies), and an assessment of the start-up problems that are inevitable when a massive environmental disaster overtakes a small town (in this case, with a population of approximately 4000). The chapter then provides information collected from initial surveys of Steller sea lions, harbour seals, sea otters, and the five species of cetacean in the area. From these surveys and other information regarding tides, currents, and wind speed and force, it was possible to predict the oil-spill trajectory, and to identify areas that required special protection.

Chapters three to five concentrate on sea otters, comprising an overview of sea-otter studies resulting specifically from the disaster, a description of methods developed to conduct boat-based population surveys, and a presentation of an intersection model for estimating mortality rates. Chapters six to ten assess the impact of the oil spill on harbour seals, Steller sea lions, killer whales, and humpback whales in terms of population, health, breeding biology, and survival of young. These studies highlight