

concentrates largely on scurvy in the polar regions, from 1633 in Greenland and Svalbard to Captain Scott's 1910–13 Antarctic expedition; this indicates the particularly strong connexion between its appearance and the success of expeditions to such areas. Shortly after Scott's expedition vitamin C was isolated and a chapter describes this together with its analysis, synthesis, production, and modern uses. The book is well produced, includes a comprehensive bibliography, and is excellently indexed. (R. K. Headland, Scott Polar Research Institute, University of Cambridge, Cambridge CB2 1ER.)

POLLUTION OF THE ARCTIC ATMOSPHERE

ARCTIC AIR POLLUTION. B. Stonehouse (editor). 1986. Cambridge, Cambridge University Press (Studies in Polar Research 5). 328 p, illustrated, hard cover. ISBN 0521-330009. £30.00, US\$49.50.

In 1985 an international conference was held at the Scott Polar Research Institute to discuss the phenomenon of Arctic haze. It was a wide-ranging meeting, considering both the origin and transport of pollution into the Arctic as well as the climatic, human and ecological consequences. *Arctic Air Pollution*, the fifth in a series of interdisciplinary publications devoted to Studies in Polar Research, draws together a remarkably coherent and well-balanced series of papers, presented at the meeting by an internationally respected group of scientists at the forefront of research into the phenomenon.

Divided into four parts, the work takes a broad perspective, examining first the composition and origins of Arctic haze and the various pathways by which pollution is transported to the Arctic from lower latitudes. Part 2 examines how the haze can perturb the balance of solar radiation, affecting the climate both locally and also potentially in mid-latitudes. More immediate implications for human health and the ecology of the region are considered in Part 3. Finally the book and the conference view the wider political issues: international legal responsibilities and the possibilities for international cooperation to study and ultimately overcome the problem.

The book has been very carefully compiled and information is easy to find. Each part is headed by a useful summary of the component papers which helps to weld the contributions into an integrated review. This is enhanced in a strong concluding section which draws out the principal findings from each session of the meeting. Although the phenomenon of Arctic haze was first noticed 30 years ago, it has been seriously studied only during the last decade. The book has successfully brought to a focus recent work across a broad front. It inevitably raises more questions than it can answer and the conclusion highlights priorities for future work.

Arctic Air Pollution will be of value to all scientists concerned with the problem of large-scale transport of pollution. However it also contains a comprehensive distillation of authoritative and up-to-date information for those who must make decisions to counter the effects of Arctic pollution. As clearly indicated in the book, this is one environmental problem for which a reasonable level of understanding has been achieved before serious human effects have occurred. It is to be hoped that future research, stimulated both by the symposium and the book, will lead to a firm basis for working out a viable strategy to prevent a deterioration in the problem in coming decades. (David A. Peel, British Antarctic Survey, Natural Environment Research Council, Madingley Road, Cambridge CB3 0ET.)