Transmissible spongiform encephalopathies of animals. OIE Scientific and Technical Review, Volume 11, No. 2, June 1992. 320 pp., price FrF185, US$34, ISBN 92–9044–300–6, ISSN 0253–1933.

In November 1986 a new disease of cattle was discovered in the United Kingdom and was named bovine spongiform encephalopathy (BSE). Immediately recognised as a scrapie-like disorder, BSE became the subject of intensive epidemiological studies which continue today, over 50 000 cases later. The epidemiological studies revealed that the disease arose from residual scrapie infectivity in meat-and-bone meal which, at the time, was widely used in the diets of cattle, especially dairy calves. Legislation imposed in 1988 cut off that source, resulting in a fall in incidence in the two-year-old age group by 1991. It is predicted that the incidence of confirmed BSE in three- and four-year-old animals will also begin to fall by the end of 1992, followed by eventual eradication. It is fortunate that unlike scrapie of sheep, BSE is not contagious and does not appear to spread by maternal transmission. The entire BSE story to date forms the foundation of this issue of the *Review* in the chapter by Dr R. H. Kimberlin who has had a professional lifetime of experience and achievement in the research of scrapie and is also an acclaimed international consultant on scrapie, BSE and related diseases.

The chapter on scrapie by Dr L. A. Detwiler is remarkable for its breadth of coverage of the natural disease in sheep, goats and moufflon, as well as the experimental disease in sheep and mice. Some of the very latest data is given on genetic and transmission studies. Control is covered in depth, drawing on knowledge distilled from many countries across the world. The areas of uncertainty are identified.

Transmissible mink encephalopathy (TME) is a rare but devastating disease of farmed mink which is presented in the third chapter written by the acknowledged experts Professor R. F. Marsh and Dr W. J. Hadlow who deal concisely and clearly with this interesting disease. Sections are given on the aetiology, epidemiology, clinical features, pathology, pathogenesis, diagnosis and control of TME.

Specialists Dr E. S. Williams and Professor S. Young, who have studied another rare and geographically-localised spongiform encephalopathy–chronic wasting disease–for many years, have provided for the first time in one place a vivid account of the epidemiology and clinical signs of the disease as well as sections on aetiology, pathology, diagnosis, prevention and control.

The chapter on molecular biology of scrapie-like agents is comprehensive, and written in a clear manner for such a complex subject by Drs A. D. Bennett, C. R. Birkett and C. J. Bostock who are amongst the foremost researchers in this area. They cover the use of rodent models, offer a detailed account of the scrapie-associated fibril protein (PrP) and the host gene that encodes it, and finally discuss the merits of current hypotheses on the structure of the agent.

The final chapter is designed to link the preceding papers of this book. Mr R. Bradley, who is the BSE Co-ordinator for the United Kingdom Ministry of Agriculture, Fisheries and Food (MAFF), has been involved with the research into BSE from the start. Dr D. Matthews is a Senior Veterinary Officer working in the Notifiable Diseases Section of the MAFF State Veterinary Service Headquaters, where he deals with the day-to-day control of BSE. Mr Bradley and Dr Matthews present the very latest field and research data on the disease and indicate what further work needs to be conducted.

This review is up-to-date and provides in one publication virtually all the practical information available on the transmissible animal spongiform encephalopathies. It is presented clearly and highlights some of the current ideas on control of the most enigmatic disease of all—scrapie of sheep.