- South African perspective. In *Biotechnology* in the Feed Industry. Proceedings of Alltech's 11th Annual Symposium. Nottingham University Press, Nottingham, UK: 175–197
- 23. Terzich M, Vanhooser S 1993 Postmortem findings of ostriches submitted to the Oklahoma Animal Disease Diagnostic Laboratory. Avian Diseases 37: 1136–1141
- 24. Van Schalkwyk S J, Brand Z, Cloete S W P, Blood J R 1998 The influence of different disinfectant protocols on the hatching performance of ostrich chicks. In Huchzermeyer F W (ed.) Ratites in a competitive world. Proceedings of the 2nd International Ratite Congress, Oudsthoorn, South Africa, 21–25 September 1998: 157–159
- 25. Van Schalkwyk S J, Brand Z, Cloete S W P,

- Brown C R 1999 Effects of time of egg collection and pre-incubation treatment on blastoderm development and embryonic mortality in ostrich embryos. *South African Journal of Animal Science* 29: 154–163
- Van Schalkwyk SJ, Brown C R, Jarvis, M, De Kock J A, Yssel A 1994 Ostrich development. Poster for Prohatch Ostrich Incubation Systems, Somchem, Somerset West, South Africa
- Van Schalkwyk SJ, Cloete SWP, Brown CR, Brand Z 2000 Hatching success of ostrich eggs in relation to setting, turning and angle of rotation. *British Poultry Science* 41: 46–52
- 28. Van Schalkwyk S J, Cloete S W P, De Kock J A 1996 Repeatability and phenotypic correla-

- tions for body weight and reproduction in commercial ostrich breeding pairs. *British Poultry Science* 37, 953–962
- 29. Verwoerd D J, Deeming D C, Angel C R, Perelman B 1999 Rearing environments around the world. In Deeming D C (ed.) *The ostrich Biology, production and health.* CABI Publishing, CAB International, Wallingford: 191–216
- Verwoerd D J, Olivier A J, Henton M M, Van Der Walt M 1998 Maintaining health and performance in the young ostrich: applications for a mannanoligosaccharide. In Lyons T P, Jacques K A (eds) Biotechnology in the feed industry, Proceedings of the 14th Alltech Annual Symposium. Nottingham University Press, Nottingham: 539–551

Book review — Boekresensie

International animal health code: Mammals, birds and bees, 10th edn

2001. Office International des Épizooties, Paris, soft cover, 485 pp., price €45, ISBN 92-9044-526-2.

The Office International des Épizooties is to be congratulated on achieving publication of the 2001 edition of the Code long before the end of 2001. The code consists, as before, of sections relating to general provisions (definitions, notification, obligations and ethics, import risk analysis including a chapter on biologicals for veterinary use, import/ export procedures), recommendations applicable to specific diseases, and appendices. The appendices contain valuable guidelines for diagnostic tests for international trade, collection and processing of semen and embryos/ova, health control and hygiene (with particular reference to poultry and bee-keeping), quarantine recommendations, inactivation of pathogens and vectors, transport of animals, and epidemiological surveillance systems. The final section is devoted to model international veterinary certificates.

While the layout remains virtually identical to the previous issue, various important changes and improvements have been made. A new definition, 'Official control programme', has been added. Section 1.2 has been rearranged in a way that users will find more logical and easy to follow. The title has been changed to 'Obligations and ethics in international trade'. As before, the section comprises two chapters, but the general obligations and ethics, including harmonisation of methods and accountability, are covered in the 1st chapter, while the 2nd chapter is devoted completely to certification procedure. The chapter on international transfer and laboratory containment of animal pathogens has been rearranged so that the table providing guidance on the level of laboratory con-

tainment required is printed on facing pages for easier perusal. Requirements for importation of ova or embryos derived in vivo and in vitro have been added to the chapter on contagious bovine pleuropneumonia, and for embryos/ova derived in vitro in the chapters on foot-and-mouth disease, leptospirosis and bovine brucellosis. The chapter on bluetongue has been extensively revised, with more detail on the determination of status, surveillance, and an increase in the infective period from 60 to 100 days. The appendix (3.2.1) relating to bovine semen has been extensively revised. Surveillance and monitoring systems for BSE have been expanded to include fallen stock and other unnatural deaths in cattle over 24 months of age. For readers like myself, with a particular interest in pig diseases, there are some disappointments. A sentence has been added to the chapter on African swine fever relating to lifelong carrier status that is not supported scientifically, and the chapter is generally in need of revision. The recommendations for importation of pigs free from porcine progressive atrophic rhinitis should include a diagnostic test, and the disease is presented nonspecifically as a single entity, which it is not. While certain shortcomings are inevitable in such a comprehensive work, it is definitely mandatory reading for all who are concerned in animal health in general and in the import/export of animals in particular.

M-L Penrith

ARC-Onderstepoort Veterinary Institute
Pretoria