

Short biography for Dr Derek Spielman MVSc, BSc, PhD, MACVSc, Grad Cert High Ed

Derek has extensive training as a veterinarian, wildlife biologist and a teacher. The topic of his PhD was conservation genetics. He has worked as a zoo and wildlife veterinarian in Australia and internationally and has extensive experience in both in situ and ex situ wildlife conservation programs for over 20 years. Derek is currently a senior lecturer in the Faculty of Veterinary Science at the University of Sydney where he teaches veterinary pathology, conservation biology and is the unit of study coordinator for the Ex situ Conservation Unit of Study in the Wildlife Masters. He is a consultant to the International Student Volunteers, having led student pre-vet projects at the Elephant Nature Park, Chiang Mai, Thailand, and in large game reserves in South Africa which includes examining and treating local village animals, mostly dogs. Derek is also the Vice President and Chief Veterinarian of WAIF, an organization that provides veterinary care to Australian native wildlife and advises on the husbandry and care of Australian wildlife to practicing veterinarians and wildlife care organisations such as WIRES and Sydney Metropolitan Wildlife Services in Sydney, rural NSW and Queensland.

Derek has many wildlife related interests including wildlife diseases in general, the health of captive and free-ranging marine mammals, wildlife rehabilitation, the pharmacology of drugs in native Australian marsupials, and managing kangaroo populations in urban settings. He is actively involved in research relating to a number of these fields and supervises honours and postgraduate students at the University of Sydney.

After several years in private veterinary practice and teaching at TAFE colleges Derek commenced at Taronga Zoo as a veterinary intern in 1986, progressing to Veterinary Officer then Chief Veterinarian/Curator in 1990. During this time he completed a P/T BSc at Macquarie University, majoring in zoology and genetics. Derek left Taronga Zoo to accept a contract as Project Manager of the NRAC Fauna Audit for the NSW NPWS in 1994 and commenced a full-time PhD in conservation genetics at Macquarie University in 1995. This candidature was interrupted in 1997 to accept a position as Senior Curator/Veterinarian at the Territory Wildlife Park for the Northern Territory Parks and Wildlife Commission, progressing to Park Manager/Senior Veterinarian in 1998 – responsible for managing the park and for the health and welfare of animals in the park's collection and donated wild native animals. The PhD was completed P/T in 2002 and Derek accepted a position as Chief Veterinarian at Ocean Park, Hong Kong. In 2005 Derek returned to Sydney with his family and commenced as the Head of Health for the Wildlife Assistance and Information Foundation as well as working in private veterinary practice till accepting the position as a lecturer in Veterinary Pathology at the University of Sydney. Here he is a member of the Koala Infectious Diseases Research Group, presents the Ex Situ Wildlife Conservation course as part of the Masters of Applied Science (Wildlife Health & Population Management) and supervised BSc(Vet) candidates investigating the microbial flora of brushtail possums and the efficacy of vaccines in macropods as well as Honours students studying moist dermatitis in brushtail possums, pulmonary parasites in brushtail possums and meningoencephalitis in brushtail possums and tawny frogmouths.

Derek continues supporting WAIF as the Head of Health and Vice-president, managing the WAIF Wildlife Clinic and presenting lecture courses, workshops and presentations on the health and welfare of rehabilitating wildlife. He also provides veterinary and husbandry expertise to zoo and wildlife veterinarians in developing countries.

Selected relevant publications

1. Barratt J., Chan D., Sandaradura I., Malik R., Spielman D., Marriott R.D., Harkness J., Ellis J., Stark D., 2016, ***Angiostrongylus cantonensis: a review of its distribution, molecular biology and clinical significance as a human pathogen***, Parasitology doi:10.1017/S0031182016000652

2. Ma G., Dennis M., Rose K., Spratt D., Spielman D., 2013, **Tawny frogmouths and brushtail possums as sentinels for *Angiostrongylus cantonensis*, the rat lungworm**, *Veterinary Parasitology* 192: 158– 165
3. Spielman, D.S., Brook, B.W., Briscoe, D.A., Frankham, R., 2004, **Does inbreeding and loss of genetic diversity decrease disease resistance?** *Conservation Genetics* 5(4): 439-448
4. Spielman, D.S., 1998, **Veterinary care of kangaroos and possums**, *In: Handling of Marsupials: a practical course for veterinarians*, Cooperative Research Centre for Conservation and Management of Marsupials, Macquarie University
5. Spielman, D.S., 1994, **First aid and emergency care for Australian native mammals**. *In: Wildlife. The T G Hungerford Refresher Course for Veterinarians, Proceedings 233. Post-graduate Committee in Veterinary Science, the University of Sydney*, pp .339-368.
6. Spielman, D.S., 1994, **Marine mammal strandings**. *In: Wildlife. The T G Hungerford Refresher Course for Veterinarians, Proceedings 233. Post-graduate Committee in Veterinary Science, the University of Sydney*, pp. 299-336.
7. Spielman, D.S., 1994, **First aid and emergency care for Australian native mammals**. *In: Wildlife. The T G Hungerford Refresher Course for Veterinarians, Proceedings 233. Post-graduate Committee in Veterinary Science, the University of Sydney*, pp .339-368.
8. Spielman, D.S., 1994, **Practical Guidelines for the Recognition and Assessment of Pain/Stress in Monotremes and Marsupials**, *In: Baker et al (eds.): Improving the Well-being of Animals in the Research Environment"*, ANZCAART.
9. Spielman D.S. and R.J. Frankham, 1992, **Modeling problems in conservation genetics using captive *Drosophila* populations: improvement of reproductive fitness due to immigration of one individual into small partially inbred populations**, *Zoo Biology* 11(5): 343-352
10. Spielman D.S., 1992, **Veterinary Care of Australian native mammals**, *In Urban Wildlife, Proceedings 204, Post-graduate Committee in Veterinary Science*.
11. Spielman D.S., 1992, **Diseases of Australian native mammals**, *In Urban Wildlife, Proceedings 204, Post-graduate Committee in Veterinary Science*.