

Curriculum Vitae

Personal Details

Full name: Joanna Christine Pollard

Email: jo.@happypet.co.nz

Citizenship: New Zealand

Academic Qualifications: BSc (Hons, Zoology), PhD (Zoology)

Current positions: Scientific reviewer, business owner/operator

Membership of Societies:

Otago Branch, NZ Royal Society
Australasian Society for the Study of Animal Behaviour

Education

Secondary:

1979 Bursary (English, Maths, Physics, Chemistry, Biology), Awarded bursary (A)

Tertiary:

1980-1983 University of Canterbury

Subjects:

1980 Introduction to Psychology, Population Biology, Animal Biology, Geology, Cell Biology, Elementary Statistical Methods

1981 Invertebrate Zoology, Chordate Zoology, Psychology Honours 1, Animal Psychology

1982 Plant Biology, Biological Data Analysis, Zoology Honours 2 (Environmental Physiology, Ecology)

1983 Zoology Honours 3 (Behaviour, Ecology, Limnology, Applied Ecology, Research project: Prey choice and assimilation efficiency in *Hoplodactylus pacificus*).

1985-1989 PhD, Zoology Department, Univ. Otago

Topic: The effects of litter size on the behaviour of ewes and lambs

2001 Stage 3 Course: Land Planning Systems (Resource Management), Univ. Otago (awarded grade A-)

2004 Stage 4 Course: Principles of Marine Biology, Univ. Otago (awarded grade A)

Professional positions held

Scientist, AgResearch, 1989-2004

Member, Animal Behaviour and Welfare Consultative Committee, 1996-2008

Member, Otago SPCA Committee, 2004-2013

Issue Convenor for Animal Welfare Policy for the Green Party, 2006

Farmer Training Resource Writer, Telford Agricultural Polytechnic 2006-2008 (casual contract basis)

Self-employed in business, 2004-present

Consultant for slaughter facility design, 2009

Secretary and Treasurer for Dog Rescue Dunedin Charitable Trust 2011- 2015

Contracts gained

MafPolicy Operational Research contracts:

Strategy to meet welfare needs in relation to shade and shelter, 1996-7

Behavioural effects of an oral dose of acetyl salicylate at docking in lambs, 1997-8

Monitoring welfare in stock presented for slaughter, 2001-2

Effects of shade on the physiology and behaviour of sheep, 2002-3

Welfare standards for organic farms, 2002-3

PPCS, consultant on deer management, 2000/2001.

DEERresearch –primary author on review on deer welfare, 2002.

Deer Farmers' Landcare Manual Project, sub-contract 2002-3 (Deer Farmers' Association project, funded by SFF). I helped the project's committee plan and construct the manual's format, designed a survey to gather information from farmers on deer farm environmental issues and their management, analysed and incorporated the survey results into the Landcare Manual, wrote the chapters on managing soil, water, trees and deer behaviour and worked with the Convenor through to the final editing stage.

Sustainable Farming Fund (SFF), 2004, to disseminate land care information to deer farmers.

SFE, 2004, to study effects of integrated stock management (sheep and cattle) on environmental management, stock health and productivity on deer farms.

Massey University, to advise on study of analgesia for deer velvet removal (2005-07).

Telford Rural Polytechnic, six contracts to write learning resources for students (Unit Standards), 2005-7. The resources are:

1. Recognise and describe management of fertiliser runoff and chemical residues in deer farming (including waterway protection, nutrient management and soil management)
2. Demonstrate knowledge of deer fawning
3. Demonstrate knowledge of deer weaning
4. Demonstrate knowledge of the deer product market, and assess and determine deer farming policy
5. Plan deer farm (farm layout, fencing, yard design, management of water, soil and indigenous vegetation, shelter, other amenities (feed pads, silage pits, chemical storage)). For this topic I formally consulted with several deer farmers while developing the resource.
6. Management strategies for a deer farm

Otago Venison, 2009, to advise on design of slaughter facilities.

Professional activities

- * Designed and carried out my own research on farm animal welfare 1985-2004. This included research on 26 commercial farms and three slaughter plants, and several surveys of sheep and deer farmer experiences and attitudes. I presented my research and findings regularly in scientific and farming publications, and at conferences and field days. From 1995 onwards I was responsible for writing funding applications to MAF Policy for Operational Research, followed by applications to FRST, DEEResearch and SFF. I was responsible for one technician in general plus teams of helpers when experiments were running, and provided supervision for four research students. I operated my own budget within AgResearch and carried out all financial planning and delivery for contract work.
- * Organised, facilitated and wrote up results of workshop for deer industry representatives to assess risks and opportunities for organic farming of deer, 2001.
- * Organised, facilitated and wrote up results of workshop for Massey, AgResearch and private consultants on animal health and welfare issues on organic sheep and beef farms, 2003.
- * Facilitated (with Tony Pearse, Deer Industry NZ (DINZ) Producer Manager) Landcorp workshops on deer farm environmental management, weaning and animal handling, 2004.
- * Facilitated workshop on Animal Welfare Policy, at the Green Party Policy Conference, 2007. Also acted as Issue Convenor for the Green Party for this topic throughout 2006.
- * Developed and marketed my own natural (deer-based) products for pets, 2004-present. 120 retailers now stock the products.
- * Writing the monthly Pet Corner for the Otago Daily Times Newspaper, 2005-2013
- * Writing newsletters for children and adults, for the Otago SPCA, 2005-2013
- * Founded and managed Dog Rescue Dunedin Charitable Trust until April 2015

Publications

Conference and Technical Papers

- Pollard, J.C.; Suttie, J.M.; Corson, I.D.; Whaanga, A. 1990: Rating the relative aversiveness of handling treatments for farmed red deer. Abstract, 17th Annual Conference of the Australasian Society for the study of Animal Behaviour.
- Pollard, J.C.; Littlejohn, R.P.; Johnstone, P.; Suttie, J.M. 1991: Measurement of behaviour and heart rate to assess the aversiveness of handling treatments used for red deer. Proceedings of a Deer Course for Veterinarians 8: 109-119.
- Pollard, J.C.; Littlejohn, R.P.; Moore, G.H. 1991: The sexual behaviour of alpacas imported from Chile. Proceedings New Zealand Society of Animal Production 51: 43-46.
- Pollard, J.C.; Littlejohn, R.P.; Johnstone, R.P.; Waldrup, K.A.; Suttie, J.M. 1992: The effects of post-treatment analgesia on behavioural responses to velvet antler removal. Proceedings of a Deer Course for Veterinarians 9: 49-55.
- Pollard, J.C.; Littlejohn, R.P.; Johnstone, R.P.; Waldrup, K.A.; Suttie, J.M. 1992: The effects

- of post-treatment analgesia on behavioural responses to velvet antler removal. Confidential report to AgResearch.
- Pollard, J.C. 1993: Behavioural quantification of welfare in farmed red deer. Proceedings, New Zealand Society of Animal Production 53.
- Pollard, J.C.; Littlejohn, R.P.; Cassidy, A.M.; Suttie, J.M. 1993: The duration of the behavioural effects of velvet antler removal. Proceedings of a Deer Course for Veterinarians 10: 9-16.
- Pollard, J.C.; Littlejohn, R.P.; Suttie, J.M. 1993: Responses of red deer to restraint versus no restraint treatments in a y-maze preference test. Abstract, 20th Annual Conference of the Australasian Society for the study of Animal Behaviour.
- Pollard, J.C.; Littlejohn, R.P.; Cassidy, A.M.; Asher, G.W., 1994: Temperament assessment in red deer. Proceedings of a Deer Course for Veterinarians, New Zealand Veterinary Association 11: 186-192.
- Pollard, J.C.; Littlejohn, R.P.; Mackintosh, C.G.; Waldrup, K.A.; Suttie, J.M.; Pearse, A.J.T. 1994: The effects of analgesia on the behaviour of stags at 0, 7 and 24 hours following antler removal. Proceedings of a Deer Course for Veterinarians, New Zealand Veterinary Association 11: 156-166.
- Pollard, J.C.; Littlejohn, R.P.; Suttie, J.M. 1994: Modifying handling environments to improve welfare in farmed red deer. Abstract, Proceedings of the 3rd International Congress on the Biology of the Deer.
- Pollard, J.C., Littlejohn, R.P. 1995: Responses of red deer to velvet antler stimulation and removal following ring and nerve block analgesia. Confidential Report to AgResearch.
- Pollard, J.C. 1996: Use of shade and shelter in farmed red deer. Abstract, International Society of Applied Ethology Regional Meeting.
- Pollard, J.C., 1997. Evaluation of electronic analgesia for velvet antler removal. Confidential report on experimental work at Invermay 26-27 November.
- Pollard, J.C.; Stevenson-Barry, J.M.; Littlejohn, R.P. 1998. Behaviour and meat quality at an Otago DSP. Proceedings of a Deer Course for Veterinarians, New Zealand Veterinary Association 15: 219-226.
- Pollard, J.C.; Pearse, A.J.T., 1998. Management of red deer at weaning. Proceedings of a Deer Course for Veterinarians, New Zealand Veterinary Association 15: 79-86.
- Pollard, J.C.; Stevenson-Barry, J.M.; Littlejohn, R.P. 1999. Factors affecting behaviour, bruising and pHu in a deer slaughter premises. Proceedings New Zealand Society of Animal Production 59: 148-151.
- Pollard, J.C.; Littlejohn, R.P.; Asher, G.W.; Pearse, A.J.T.; Stevenson-Barry, J.M.; Manley, T.R. 2000. Physiological quantification of pre-slaughter handling stress in red deer. Proceedings of a Deer Course for Veterinarians 17: 123-130.
- Pollard, J.C.; Asher, G.W.; O'Neill, K.M.; Stevens, D.R.; Pearse, A.J.T.; Littlejohn, R.P. 2000. Effects of weaning date on hind and calf productivity. Proceedings of a Deer Course for Veterinarians 17: 137-142.
- Pollard, J., Drewry, J., 2002. Calving environments for farmed red deer: a review of current knowledge and a pilot study on soil quality. Proceedings of a Deer Course for Veterinarians 19: 97-104.
- Pollard, J., Stevens, D., 2002. Production outcomes when management practices influence deer behaviour. The nutrition and management of deer on grazing systems. Grassland Research and Practice Series 8: 73-77.
- Asher, G.W., Pollard, J., 2002. Influence of nutrition and lactation on ovulation and conception in red deer. The nutrition and management of deer on grazing systems. Grassland Research and Practice Series 8: 65-68.

- Pollard, J.C., Littlejohn, R.P., Scobie, D.R., Pearse, A.J.T., Stevenson-Barry, J.M., 2003. Maintaining product quality from the farm gate to the processing facility. *Proceedings of a Deer Course for Veterinarians* 20: 237-242.
- Pollard, J.C., 2003. Research on calving environments for red deer: a review. *Proceedings of a Deer Course for Veterinarians* 20: 247-250.
- Pollard, J.C., 2004. Overview of on-farm deer welfare issues. *Proceedings of a Deer Course for Veterinarians* 21: 136-140.
- Pollard, J.C., 2005. Square pegs in round holes? Meeting environmental needs of farmed deer. Abstract, ASSAB meeting, Massey University (plenary speaker).
- Scobie, D.R., Pollard, J.C., 2007. Preliminary observations on fresh and healed scars in deer skins. *Proceedings, New Zealand Society of Animal Production* 67: 356-360.

Refereed Publications

- Graynoth, E.; Bennet, L.C.; Pollard; J.C. 1986. Diet of landlocked sockeye salmon and trout in the Waitaki Lakes, New Zealand. *New Zealand Journal of Marine and Freshwater Research* 20: 537-549.
- Kerr, C.I.; Williams, J.M.; Ross, W.D; Pollard, J.C. 1987. The classification of land according to the degree of rabbit infestation in Central Otago. *Proceedings, New Zealand Grassland Association* 48: 65-70.
- Pollard, J.C. 1992: The effects of litter size on the behaviour of ewes and lambs. *Applied Animal Behaviour Science* 34: 75-84.
- Pollard, J.C.; Littlejohn, R.P.; Johnstone, P.; Laas, F.J.; Corson, I.D.; Suttie, J.M. 1992: Behavioural and heart rate responses to velvet antler removal in red deer. *New Zealand Veterinary Journal* 40: 56-61.
- Pollard, J.C.; Littlejohn, R.P.; Suttie, J.M. 1992: Behaviour and weight change of red deer calves during different weaning procedures. *Applied Animal Behaviour Science*, 35: 23-33.
- Pollard, J.C.; Littlejohn, R.P.; Davis, G.H. 1993: Behaviour and weight change of alpacas following weaning. *New Zealand Veterinary Journal* 41: 161-165.
- Pollard, J.C.; Littlejohn, R.P.; Scott, I.C. 1994: The effects of mating on the sexual receptivity of female alpacas. *Animal Reproduction Science* 34: 289-297.
- Pollard, J.C.; Littlejohn, R.P.; Suttie, J.M. 1994: Responses of red deer to restraint in a y-maze preference test. *Applied Animal Behaviour Science* 39: 63-71.
- Pollard, J.C.; Littlejohn, R.P.; Suttie, J.M. 1993: Effects of isolation and mixing of social groups on heart rate and behaviour of red deer stags. *Applied Animal Behaviour Science* 138: 311-322.
- Pollard, J.C.; Littlejohn, R.P. 1994: Behavioural effects of light conditions on red deer in a holding pen. *Applied Animal Behaviour Science* 41: 127-134
- Pollard, J.C., Littlejohn, R.P.; Moore, G.H. 1994: Quantification of temperament in weaned deer calves of two genotypes (*Cervus elaphus* and *Cervus elaphus* X *Elaphurus davidianus* hybrids). *Applied Animal Behaviour Science* 41: 229-241.
- Pollard, J.C.; Littlejohn, R.P.; Moore, G.H. 1994: Seasonal and other factors affecting the sexual behaviour of alpacas. *Animal Reproduction Science* 37: 349-356.
- Pollard, J.C.; Littlejohn, R.P. 1995: Effects of social isolation during handling on heart rate and behaviour of alpacas. *Applied Animal Behaviour Science* 45: 165-174.
- Pollard, J.C.; Littlejohn, R.P. 1995: Consistency in avoidance of humans by individual red deer. *Applied Animal Behaviour Science* 45: 301-308
- Pollard, J.C.; Littlejohn, R.P. 1995: Effects of lighting on heart rate and positional

- preferences during confinements in farmed red deer. *Animal Welfare* 4: 329-337.
- Pollard, J.C.; Littlejohn, R.P. 1996. The effects of pen size on the behaviour of red deer confined in yards. *Applied Animal Behaviour Science* 47: 247-253.
- Pollard, J.C.; Littlejohn, R.P. 1998. Effects of winter housing, exercise and dietary treatments on the behaviour and welfare of red deer hinds. *Animal Welfare* 7: 45-56.
- Pollard, J.C.; Mackintosh, C.G.; Littlejohn, R.P. 1998. Neuroleptic treatment of red deer calves at weaning. *New Zealand Veterinary Journal* 46: 111-113.
- Pollard, J.C.; Littlejohn, R.P.; Grant, A. 1998. Fenceline pacing in farmed red deer hinds at calving. *Animal Welfare* 7: 283-291.
- Pollard, J.C. 1999. Shelter benefits for lamb survival in southern New Zealand. I. Postal survey of farmers' opinion. *New Zealand Journal of Agricultural Science* 42: 165-170.
- Pollard, J.C.; Littlejohn, R.P. 1999. Shelter benefits for lamb survival in southern New Zealand. II. Sheltering behaviour and effects on productivity. *New Zealand Journal of Agricultural Science* 42: 171-177.
- Pollard, J.C.; Littlejohn, R.P. 1999. Activities and social relationships of red deer at pasture. *New Zealand Veterinary Journal* 47: 83-87.
- Pollard, J.C.; Littlejohn, R.P. 1999. A note on sheltering behaviour by ewes before and after lambing. *Applied Animal Behaviour Science* 61: 313-318.
- Pollard, J.C.; Littlejohn, R.P. 2000. Effects of management at weaning on behaviour and weight gain in farmed red deer calves. *Applied Animal Behaviour Science* 67: 151-157.
- Pollard, J.C.; Littlejohn, R.P.; Roos, V. 2000. Behavioural effects of an oral dose of acetyl salicylate at tail docking in lambs. *Applied Animal Behaviour Science* 71: 29-42.
- Pollard, J.C.; Asher, G.W.; Littlejohn, R.P. 2002. Weaning date affects calf growth rates and hind conception dates in farmed red deer (*Cervus elaphus*). *Animal Science* 74: 111-116.
- Pollard, J.C.; Littlejohn, R.P.; Asher, G.W.; Pearse, A.J.T.; Stevenson-Barry, J.M.; Manley, T.R. 2002. A comparison of biochemical and meat quality variables in red deer (*Cervus elaphus*) following either slaughter at pasture or killing at a deer slaughter plant. *Meat Science* 60: 85-94.
- Pollard, J.C., Wilson, P.R., 2002. Welfare of farmed red deer in New Zealand 1: Management practices. *New Zealand Veterinary Journal* 50: 214-220.
- Wass, J.A.; Pollard, J.C.; Littlejohn, R.P. 2003. A comparison of the calving behaviour of adult and yearling red deer (*Cervus elaphus*) hinds. *Applied Animal Behaviour Science* 80: 337-345.
- Pollard, J.C., Littlejohn, R.P., Pearse, A.J.T., 2003. Shade and shelter for farmed deer in New Zealand: Results from a survey of farmers. *New Zealand Journal of Agricultural Research* 46: 287-294.
- Wass, J.A., Pollard, J.C., Littlejohn, R.P., 2004. Observations on the hiding behaviour of farmed red deer (*Cervus elaphus*) calves. *Applied Animal Behaviour Science* 88: 111-120.
- Chaya, W., Pollard, J.C., Littlejohn, R.P., 2006. A note on the behaviour of lactating red deer hinds and their calves during repeated handling. *Applied Animal Behaviour Science* 101: 177-182.
- Pollard, J.C., 2006. Shelter for lambing sheep in New Zealand: A review. *New Zealand Journal of Agricultural Research* 49: 395-404.
- Pollard, J.C., Webster, J.R., Cox, N., Hogan, N., Chaya, W., Wigboldus, L., Paterson, R., Huddart, F. Behavioural and physiological differences in adult sheep with and without access to shade. Submitted to *New Zealand Veterinary Journal*.
- Pollard, J.C., Littlejohn, R.P., O'Neill, K.M., Ward, J.F., Scott, I.C.. Dam-calf relationships in

farmed deer (*Cervus elaphus* spp.) during the third to ninth months of lactation.
Submitted to AgResearch for internal review.