



SJDAWC

SIR JAMES DUNN ANIMAL WELFARE CENTRE *at the Atlantic Veterinary College*



PROMOTING ANIMAL WELFARE THROUGH RESEARCH, SERVICE, AND EDUCATION

2018 ANNUAL REPORT

ATLANTIC VETERINARY COLLEGE
UNIVERSITY OF PRINCE EDWARD ISLAND
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SJDAWC 2018 ANNUAL REPORT

Sir James Dunn Animal Welfare Centre, Atlantic Veterinary College, University of Prince Edward Island

MANDATE

The Sir James Dunn Animal Welfare Centre exists to promote animal welfare by generating and disseminating impartial and scientifically based knowledge and understanding of animal welfare issues.

The Centre facilitates, focuses, and coordinates academic and research resources at the Atlantic Veterinary College to carry out animal welfare research and education, and to provide information and advice to industry, government, organizations, and the public.

STRUCTURE

The SJDAWC is governed by a Management Board that reports to the Dean of the Atlantic Veterinary College.

MANAGEMENT BOARD

- » DR. LARRY HAMMELL, Interim Dean, UPEI School of Graduate Studies; Associate Dean, AVC Graduate Studies and Research (Chair)
- » DR. MICHAEL COCKRAM, Chair in Animal Welfare (ex-officio)
- » DR. ALICE CROOK, Coordinator, SJDAWC (ex-officio)
- » MS. ANNA MACDONALD, AVC External Relations Officer (ex-officio)
- » DEPARTMENTAL REPRESENTATIVES
 - » DR. SUNNY HARTWIG, Department of Biomedical Sciences
 - » DR. JENNIFER BURNS, Department of Health Management
 - » DR. ORIANA RAAB, Department of Companion Animals
 - » DR. ANNE MUCKLE, Department of Pathology and Microbiology
- » DR. CAROLYN SANFORD, Chief Provincial Veterinarian, Government of Prince Edward Island (external representative to the Management Board)

SJDAWC ACTIVITIES IN 2018

AVC Winter Webinar Series (February/March)

Behaviour and neurodevelopment in puppies and kittens, and emergent data in behavioural medicine. Three webinars given by Karen L Overall, MA, VMD, PhD, DACVB

14th annual Animal Welfare in Practice conference: Whale Stranding (September)

Keynote speaker Dr. Michael Moore (Woods Hole Oceanographic Institution), with Drs. Art Ortenburger and Pierre-Yves Daoust (AVC), and Tonya Wimmer (Marine Animal Response Society)

- » Co-hosted with the AVC Animal Welfare; Exotics, Lab Animal and Wildlife; and Aquatics clubs, with support from the Animal Welfare Foundation of Canada. Speakers' presentations may be found at <http://awc.upei.ca/animal-welfare-in-practice-2018-whale-stranding/>

GRANTS AWARDED

Through an annual competition, the SJDAWC provides funding for service and research projects.

SERVICE

Service grants 2018

GUNN MCQUILLAN H, FOLEY P, MACDONALD R, MACLEAN M, MACLEAN R, MOAK P. Medical and surgical care of homeless animals (2018–20), with the PEI Humane Society (PEIHS)

VANLEEUEWEN J, RICHARDS S. Youth training in animal welfare in Kenya and Canada—Part 3 (2018), with several community partners

Ongoing service projects

CROOK A, LING K, GUNN MCQUILLAN H. Pegasus feral cat neuter program, with the PEI Cat Action Team (CAT)

CROOK A, GUNN MCQUILLAN H. Pegasus Helping Hand Fund

CAREY AM, KENNY C. AVC humane dog training program (2017-19), with the PEIHS

FOLEY P. Feral cat neuter program, with CAT

FOLEY P. Financial aid for spay or neuter of companion animals of owners on fixed income (2016–19), with SpayAid PEI

HOPSON M. Chinook Project (funded independently since 2011)

RAAB O, SPEARS J, DAOUST P-Y. Clinical wildlife care at AVC

Please visit http://awc.upei.ca/Service_projects for more information about these and other service projects.

RESEARCH

Research grants 2018

HEIDER L, VANLEEUEWEN J, MCKENNA S, GITAU G, KIMELI P. Frequency, distribution, determinants and improvements of calf affective welfare status on smallholder dairy farms in Kenya (observational and clinical trials)

MCDUFFEE L, MONTELPARE W, OVERALL K. Recognition of stress levels in hospitalized equine patients during various veterinary procedures: Adaptation of a stabled horse stress scale to a cohort of hospitalized horses

MELLISH M, DAOUST P-Y, VANDERSTICHEL R. Assessment of welfare of Sable Island horses through morphometric and radiographic hoof evaluation

RAAB O, FOLEY P, MILLEY E. Investigation of the prevalence and clinical significance of *Eucoleus boehmi* in domestic dogs on Prince Edward Island, Canada

On-going research projects

GILROY C, BURTON S, FOOTE K, VANDERSTICHEL R, JOHN E. Appropriate prognosis and treatment of horses with respiratory disease—assessing microscopic area and sample volume of bronchoalveolar lavage fluid

HARTWIG S. Development of an evidence-based, high-sensitivity canine Lyme borreliosis diagnostic protocol to improve the welfare of dogs in Atlantic Canada

HEIDER L, CAMERON M, SANCHEZ J, MCCLURE J. Care of the dairy calf: Investigation into the welfare and health of calves in the Maritime provinces of Canada

MACMILLAN K, COCKRAM M, SANCHEZ J. Risk factors for musculoskeletal injuries in a population of Standardbred racehorses on PEI

GRADUATE STUDENTS FUNDED OR PARTIALLY FUNDED BY THE SJDAWC

Current students

ANAM HANZA. Recognition of stress levels in hospitalized equine patients during various veterinary procedures: Adaptation of a stabled horse stress scale to a cohort of hospitalized horses (with L McDuffee)

ALEX ALVAREZ. Canine standing stifle angle, preoperative tibial tuberosity advancement measurements, and associated welfare implications (with J Dundas)

KIM FOOTE. Appropriate prognosis and treatment of horses with respiratory disease—assessing microscopic area and sample volume of bronchoalveolar lavage fluid (with C Gilroy) (*thesis successfully defended*)

EMILY KATHAMBI KIUGU. Research and training to improve stall design and management for better cow welfare and productivity on smallholder dairy farms in Kenya—Phase 2 (with J VanLeeuwen)) (*thesis successfully defended*)

PETER KIMELI. Cohort and controlled trial studies of dairy calf welfare and its factors within smallholder zero-grazing farms in Kenya (with J VanLeeuwen)

MEGAN ROBERTSON. Achieving meaningful improvements in dairy cow welfare by reducing lameness: Evaluating the effectiveness of herd performance benchmarking and integrated, web-based risk management (with G Keefe)

JAMYE ROUETTE. Risk factors for musculoskeletal injuries in a population of Standardbred racehorses on PEI (with K MacMillan and M Cockram)

PUBLICATIONS

BROCKHOFF E, BROWN J, COCKRAM M, CROWE T, FAUCITANO L, HALEY D, SCHWARTZKOPF-GENSWEIN K, SCHWEAN-LARDNER K, STOJKOV Y, RIOJA-LANG F. 2018. Code of Practice for the Care and Handling of Farm Animals: Transportation Review of Scientific Research on Priority Welfare Issues. http://www.nfacc.ca/resources/codes-of-practice/transport/transportation_sc_report_mar2018.pdf

CHATIGNY F. 2018. The controversy on fish pain: A veterinarian's perspective. *Journal of Applied Animal Welfare Science*. <https://doi.org/10.1080/10888705.2018.1530596>

COCKRAM MS, DULAL KJ, MOHAMED RA, REVIE CW. 2018. Risk factors for bruising and mortality of broilers during manual handling, module loading, transport and lairage. *Canadian Journal of Animal Science*. <https://doi.org/10.1139/CJAS-2018-0032>

COCKRAM MS, DULAL KJ. 2018. Injury and mortality in broilers during handling and transport to slaughter. *Canadian Journal of Animal Science* 98(3):416–432. <https://doi.org/10.1139/cjas-2017-0076>

COCKRAM MS, HUGHES BO. 2018. Chapter 8. Health and Disease. In: Appleby MC, Olsson AS, Galindo F. *Animal Welfare, 3rd Edition*. CABI, Wallingford, UK. P141-159 [Bookshelf Online]. <https://online.vitalsource.com/#/books/9781786390226/andAppendix8P379-404> <https://www.cabi.org/Uploads/CABI/OpenResources/90202/Appleby%20Appendix%208.pdf>

COCKRAM M, TENNESSEN T, BATE L, BERGERON R, CLOUTIER S, FISHER A, HÖTZE M. eds. 2018. *Proceedings of the 52nd Congress of the International Society for Applied Ethology*. ISAE 2018. July 30 to August 3, 2018. Ethology for Health and Welfare. University of Prince Edward Island, Charlottetown, Prince Edward Island. Edited by Wageningen Academic Publishers, The Netherlands.

KATHAMBI EK, VANLEEUEWEN JA, GITAU GK, MCKENNA SL. 2018. A cross-sectional study of the welfare of calves raised in smallholder dairy farms in Meru, Kenya, 2017. *Veterinary World* 11(8):1094-1101.

Veterinarians without Borders Youth Volunteer Program in Kenya 2017. 2018. *Canadian Veterinary Journal* 59:1165-67.

PRESENTATIONS

COCKRAM M. 2018. Transport of broilers. Atlantic Poultry Conference, Wolfville, NS, Canada.

CROOK A. 2018. A Life Worth Living. Students of the Canadian Veterinary Medical Association conference, Charlottetown, PEI, Canada.

CROOK A. 2018. Animal Abuse: Effective Veterinary response. Congrès vétérinaire québécois, Saint-Hyacinthe, PQ, Canada.

CROOK A. 2018. Animal Welfare: A Life Worth Living. Congrès vétérinaire québécois, Saint-Hyacinthe, PQ, Canada.

CROOK A. 2018. Welfare-friendly Veterinary Practice. Congrès vétérinaire québécois, Saint-Hyacinthe, PQ, Canada.

HAMILTON S, HURNIK D, CREIGHTON C, LAMONT L. 2018. A pilot evaluation of intramuscular alfaxalone with or without azaperone for castration of piglets. World Congress of Veterinary Anaesthesiology, Venice, Italy. (poster)

FOOTE K. 2018. Effect of microscopic area on differential cell counts in evaluation of equine bronchoalveolar lavage fluid. Graduate Studies and Research (GSR) Days, Charlottetown, PEI, Canada.

JEWEL M, SANCHEZ J, KEEFE G, COCKRAM M, CAMERON M, MCKENNA S, SPEARS J. 2018. Prevalence of lameness based on scoring system assessing weight bearing and foot positioning of tie-stall housed dairy cattle. Congress of the International Society of Applied Ethology (ISAE), Charlottetown, PEI, Canada. (poster)

JEWEL M, SANCHEZ J, KEEFE G, COCKRAM M, CAMERON M, MCKENNA S, SPEARS J. 2018. Relationships between types of hoof lesions and behavioural signs of lameness in Holstein cows housed in tie-stall facilities. Congress of the ISAE, Charlottetown, PEI, Canada.

JEWEL M et al. 2018. Relationships between types of hoof lesions and behavioural signs of lameness in Holstein cows housed in tie-stall facilities. American Association of Bovine Practitioners Conference, Phoenix, AZ, USA.

JEWEL M et al. 2018. A shorter on-farm dairy welfare assessment protocol that can provide useful feedback to producers. American Association of Bovine Practitioners Conference, Phoenix, AZ, USA.

JEWEL M et al. 2018. Relationships between types of hoof lesions and behavioural signs of lameness in Holstein cows housed in tie-stall facilities. International Symposium of Epidemiology and Economics, Chiang Mai, Thailand.

KATHAMBI EK, VANLEEUEWEN JA, GITAU GK. 2018. Cross-sectional study of cow comfort and risk factors of lying behavior and cleanliness of smallholder dairy cows in Kenya. International Society for Veterinary Epidemiology and Economics (ISVEE) conference. Chiang Mai, Thailand.

KATHAMBI EK, GITAU GK, MUCHEMI GM, VANLEEUEWEN JA, KAIRU WS. 2018. Seroprevalence of bovine leukosis virus in contrasting farming systems in Kenya. Kenyan Veterinary Association conference, Nyeri, Kenya.

KATHAMBI EK, VANLEEUEWEN JA, GITAU GK. 2018. Cross-sectional study of calf comfort and risk factors of leg hygiene of smallholder dairy calves in Kenya. Congress of the ISAE, Charlottetown, PEI, Canada.

KATHAMBI EK, VANLEEUEWEN JA, GITAU GK. 2018. Cross-sectional study of cow comfort and risk factors of lying behavior and cleanliness of smallholder dairy cows in Kenya. Congress of the ISAE, Charlottetown, PEI, Canada.

KATHAMBI EK, VANLEEUEWEN JA, GITAU GK, REVIE C, KAMUNDE C. 2018. Factors associated with lying time, and cow and stall cleanliness on smallholder dairy cows in Kenya. Graduate Studies and Research (GSR) Days, Charlottetown, PEI, Canada.

KIMELI P, MAKAU D, VANLEEUEWEN JA, GITAU GK, MCKENNA SL, HEIDER LC. 2018. Factors associated with cow leg hygiene on smallholder dairy farms in Kenya. GSR Days, Charlottetown, PEI, Canada.

RICHARDS S, VANLEEUEWEN JA, SHEPELO G, GITAU GK, KAMUNDE C, UEHLINGER F, WICHTEL JJ. 2018. Clinical trial of costs and benefits of cow comfort management practices on smallholder dairy farms in Kenya. International Society for Veterinary Epidemiology and Economics conference, Chiang Mai, Thailand.

ROUETTE J, COCKRAM M, SANCHEZ J, MACMILLAN K. 2018. Epidemiologic study of musculoskeletal injuries in Standardbred Racehorses on PEI. Congress of the ISAE, Charlottetown, PEI, Canada.

Newsletters and non-peer reviewed publications

SJDawc News #34— 2018

<http://awc.upei.ca/sjdawc-news-34/>

“Animal Talk”—a bi-monthly newspaper column on issues related to companion animal welfare; Ed. A Crook <https://www.princeedwardisland.ca/en/information/agriculture-and-fisheries/companion-animal-welfare-initiative-cawi>

EDUCATION

VHM125 Year 1 course Animal Behaviour and Animal Welfare

VHM412 Year 4 course Animal Welfare Regulation and Assessment

COCKRAM MS. Coach for AVC student team in the Veterinary Division of the 2018 annual Animal Welfare Judging and Assessment Contest, Colorado State University, Denver, CO. November

COCKRAM MS. Supervisor, Global Affairs Canada Scholarship (Emerging Leaders in the Americas Program) for Ana Beatriz Almeida Torres, Master’s student, Federal University of Santa Catarina, Florianópolis, Brazil, to undertake a research project as an international exchange student studying temperament in Standardbred horses. November 2017 to April 2018

COMMITTEE/BOARD MEMBERSHIPS

M COCKRAM

- » Board of Directors, Atlantic Poultry Research Institute
- » Editorial Board, Section Editor, “Behaviour, Health, and Welfare” for *Animal: International Journal of Animal Biosciences*
- » Editorial board, *Journal of Applied Animal Welfare Science*
- » Reviewing of manuscripts
 - » *Animal Welfare, Applied Animal Behaviour Science, Frontiers in Veterinary Science, Journal of Animal Science, Journal of Applied Animal Welfare Science, Journal of Equine Veterinary Science, Plos One.*
- » NFACC Transport Code
 - » Member of Scientific Committee
- » CVMA Animal Welfare Committee
 - » Large Animal/Exotic-Wild Subcommittee
- » International Society for Applied Ethology 2018 Congress, UPEI, July 30–August 3
 - » Chair of local planning committee and scientific committee

A CROOK

- » Board of Directors, Humane Canada (formerly Canadian Federation of Humane Societies)
- » PEI Companion Animal Welfare Initiative
- » Vice-Chair, Appeal Board for PEI Animal Welfare Act
- » CVMA, Small Animal Sub-committee of Animal Welfare Committee
- » Reviewing of manuscripts
 - » *Applied Animal Behaviour Science*

AWARDS

- » 2018 Sir James Dunn Animal Welfare Graduate Scholarship
 - » Alex Alvarez, DVM: two years of Masters funding to work with Jim Dundas, AVC, on the project, “Canine standing stifle angle, preoperative tibial tuberosity advancement measurements, and associated welfare implications”
- » 2018 Sir James Dunn Animal Welfare Summer Research Award
 - » Jessica D’Amico. Efficacy of acute pain control in Ball Pythons (*Python reguis*)
- » 2018 Christofor Award in Animal Welfare
 - » Natalie Wright

- » Dr. Tom A. W. Taylor Scholarship 2018
 - » Amanda Youngblood
- » 2018 Animal Welfare Award, World Veterinary Association (supported by Ceva Santé Animale), awarded May 2018, Barcelona, Spain
 - » Alice Crook

FUNDING

- » Sir James Dunn and Christofor Foundations: founding and sustaining funding
- » Multi-year donors: Fairview Animal Hospital, Vetcetera Animal Hospital, Glenn Loranger, the late David Madren, the late Kay Alexandor, Gladys Ascah
- » Project funding:
 - » Research support—Veterinarians Without Borders—Canada; Dairy Farmers of Canada
 - » Pegasus feral cat neuter program—Pegasus Family Foundation through Silicon Valley Community Foundation
 - » Pegasus Helping Hand Fund—Pegasus Family Foundation through Silicon Valley Community Foundation, AVC classes of 2011 and 2001, Dr. Christine Savidge
 - » Chinook Project—Government of Newfoundland and Labrador, Ann McCain Evans, Rathlyn Foundation, Iqaluit Humane Society, First Air, Zoetis Animal Health, Boehringer-Ingelheim, Air Labrador, Veterinarians Without Borders—Canada, and the Victoria Kennel Club
- » Universities Federation of Animal Welfare, UK (student initiatives)
- » Many other generous individual supporters *in memoriam*

CONTACT INFORMATION

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