

SJDAWC NEWS

NUMBER 35—2019

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



PROMOTING ANIMAL WELFARE THROUGH RESEARCH, SERVICE, AND EDUCATION

25th ANNIVERSARY SJDAWC

1994–2019



UNIVERSITY
of Prince Edward
ISLAND



ALSO IN THIS ISSUE



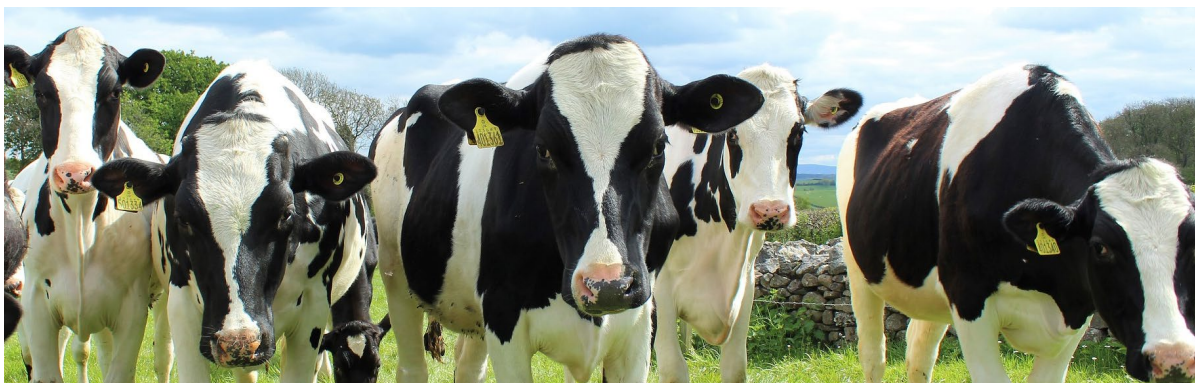
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ANIMAL WELFARE IN PRACTICE: DAIRY COW WELFARE

SEPTEMBER 20–21, 2019

The SJDAWC's fifteenth annual Animal Welfare in Practice conference will focus on best practices for dairy cow welfare, with keynote speaker Dr. Kathryn Proudfoot, incoming director of the SJDAWC at AVC. Dr. Proudfoot will give a talk titled "On-farm welfare assessment: How do we know if dairy cows have good welfare?" on Friday, September 20, at 7 pm, AVC Lecture Theatre A. Her presentation is open to all.

On Saturday, September 21, the conference will feature sessions on various aspects of dairy cow welfare, given by Dr. Proudfoot, Dr. Shawn McKenna (Associate Professor

and Farm Service chief at AVC), and Nancy Douglas (proAction coordinator, Dairy Farmers of PEI). The conference will wrap up with an interactive practical session on improving dairy welfare after an on-farm assessment. Registration is required for the Saturday sessions. Please see awc.upei.ca for detailed program and registration information.

The conference is co-hosted by the Sir James Dunn Animal Welfare Centre, the AVC Animal Welfare Club with support from the Animal Welfare Foundation of Canada, and the AVC Bovine Club.



FROM THE COORDINATOR'S DESK

Welcome to the 2019 edition of the *SJDAWC News*. This year, we are marking 25 years since the founding of the SJDAWC (initially as the Animal Welfare Unit). This is my last issue, as I retire after more than 25 very interesting and rewarding years with the SJDAWC and AVC. We are very excited to welcome the incoming director of the SJDAWC, Dr. Katy Proudfoot, who begins her appointment on October 1.

Elsewhere in this issue, you will find information about our upcoming dairy welfare conference in September, reports from two SJDAWC-funded projects completed since our last newsletter, and various highlights from the past year, including award winners. Recent publications and presentations are listed on pages 10 and 11. On page 12, we thank our many supporters, with a spotlight on the community activities of a long-standing donor, Glenn Loranger, and his dog, Luke.

We welcome your feedback at animalwelfare@upe.ca. Please contact us at animalwelfare@upe.ca to receive the newsletter (in full colour!) by email and to be added to our email list for occasional upcoming events. To learn how you can support the Centre, please go to upe.ca/awc or write to:

The Sir James Dunn Animal Welfare Centre
Atlantic Veterinary College,
University of Prince Edward Island
550 University Avenue
Charlottetown, PEI, Canada C1A 4P3

All donations are tax deductible.

In 1994, a grant from the Sir James Dunn Foundation, at the behest of Lady Beaverbrook, enabled the Atlantic Veterinary College at UPEI to establish the Animal Welfare Unit (AWU), with its initial focus on three projects. Continued support from the Sir James Dunn, Christofoor, and Friends of Christofoor Foundations provided a stable footing for the growth of the AWU into the Sir James Dunn Animal Welfare Centre (SJDAWC), a widely recognized and respected centre that advances animal welfare through a broad array of initiatives in research, service, and education in Atlantic Canada and well beyond. UPEI, AVC, and the Centre are very grateful for this long-term support—totalling approximately \$8 million to date—which has provided the secure funding that has been central to the Centre's development. Going forward, the SJDAWC will continue to expand upon its successes under the three broad themes of research, service, and education—conducting research with practical implications to improve animal welfare, supporting meritorious service projects with direct benefits to animals, educating veterinary and graduate students and the public in animal welfare, and serving as a centre of expertise.

As we celebrate 25 years, we are very pleased to welcome Dr. Kathryn Proudfoot as Director of the SJDAWC and Associate Professor, Health Management and Companion Animals.



In October 2015, AVC's highest honour, the Honourable Eugene F. Whelan Green Hat Award, was presented to the trustees of the Christofoor and Sir James Dunn Foundations—Tom Taylor, Michael Doyle (back row, with Alice Crook and Dean Greg Keefe), Esma Taylor, Cynthia Doyle (front row), and the late Dr. Tom A.W. Taylor (posthumously)—for their consistent financial support and encouragement of AVC's Sir James Dunn Animal Welfare Centre.

25th ANNIVERSARY SJDAWC

1994–2019

MEET THE INCOMING DIRECTOR OF THE SJDAWC

Dr. Kathryn (Katy) Proudfoot's passion for animal welfare research began as a graduate student at the University of British Columbia's Animal Welfare Program, where she completed her MSc and PhD, focusing her research on housing and management strategies that improve the welfare of dairy cattle before and after giving birth. Since 2013, she has been at Ohio State University's College of Veterinary Medicine where she is currently Associate Professor, Veterinary Preventive Medicine. There, she led the development of the animal welfare curriculum, through which she has been teaching animal welfare and animal behaviour courses to pre-clinical and clinical veterinary students for several years.

Dr. Proudfoot's current research relates to maternal behaviour in dairy cattle, veal calf health and welfare, and measuring stress in animals. She collaborates nationally and internationally on welfare-related research in several species and looks forward to broadening this further. As she states, and aptly demonstrates, "Principles underlying animal welfare research are broadly applicable across species."

Dr. Proudfoot will join AVC as Director, SJDAWC, and Associate Professor, cross-appointed to the Departments of Health Management and Companion Animals, on October 1, 2019. We look forward very much to welcoming Katy and her family to Prince Edward Island in the fall.



Dr. Katy Proudfoot with Jersey calf

LADY BEAVERBROOK

Lady Beaverbrook, (previously Lady Dunn, née Marcia Christoforides, 1909–1994) was a philanthropist, art collector, and racehorse owner. Her passion for her horses and dogs led to her wish to establish a centre for the benefit of animals in the Maritimes, to be funded through the Christofo and Sir James Dunn Foundations. As a result of her generosity, and through working closely with the trustees of the Foundations, the AWU, now the SJDAWC, was established in 1994 and has thrived.

Throughout her life, Lady Beaverbrook owned many Thoroughbred racehorses for which she cared deeply. Six of her horses were still living in 2009 and had been brought to Canada from England. AVC was pleased to accept the responsibility for their care for the rest of their days—Brave Boy, Rep (High Repute), Sassy (Surpassing), Abby (Terigem), MoE (Maid of Essex), and Zeet (Zeetaro). Since 2009, the horses have gradually passed away, and in May of this year, the remaining two—MoE and Zeet—were euthanized due to chronic ailments related to old age. Both were nearing 40—a venerable age for Thoroughbreds.

The SJDAWC and AVC are very grateful to Lady Beaverbrook for her vision and generosity, which have allowed us to directly improve the lives of animals and contribute to the understanding of animal welfare regionally and globally. It has been a privilege to care for her horses. Particular thanks are due to Marven MacLean, MacLean Stables, for the daily care and attention he has provided to these six horses since 2009, and to Drs. Wendy Duckett and Kathleen MacMillan who spearheaded their veterinary care over that time.

MoE and Abby, 2014



COMPLETED PROJECTS 2018

Below are brief summaries for two SJDAWC-funded projects completed in 2018, one research and the other service. Publications and presentations since the last newsletter are listed on pages 10 and 11.

RESEARCH

ACHIEVING MEANINGFUL IMPROVEMENTS IN DAIRY COW WELFARE BY REDUCING LAMENESS: EVALUATING THE EFFECTIVENESS OF HERD PERFORMANCE BENCHMARKING AND INTEGRATED, WEB-BASED RISK MANAGEMENT

J G Keefe, M Cameron, M Cockram, S McKenna, J Sanchez

Lameness in dairy cattle is a significant animal welfare issue for the Canadian dairy industry. Estimates for within-herd lameness prevalence range from 0% to 50%, with an average of 20%. Previous research has demonstrated that an important barrier to reducing lameness and improving dairy cow welfare is that farmers underestimate the level of lameness on their farm.

The first goal of this project was to create a web-based benchmarking and risk management tool for Atlantic Canadian dairy herds to enable dairy farmers to view their own farm's lameness outcome data, make comparisons to farms of similar size, region and type, and obtain recommendations for improvements that are specific to their situation. Additional goals were to establish within-herd lameness prevalence data for the Maritime provinces and to evaluate factors associated with reducing and controlling lameness prevalence in the region. A final goal was to conduct a lameness audit one year after the initial assessment to determine the effectiveness of the tools at reducing lameness in dairy cows in the Maritimes, with potential for application to the Canadian dairy industry.

SUMMARY OF PROJECT RESULTS

Cows from 80 dairy herds throughout the Maritime provinces were assessed

for welfare indicators such as lameness, body condition, and lesions over the joints on the extremities. Measurements of the environment, such as cleanliness and dimensions of the lying space, were also taken. This information was used to determine welfare indicator prevalence and what factors increase/decrease the risk of welfare-related issues occurring in the herd. The investigators found that 19% of observed cows within each herd were lame and 46% had lesions over the hock joints (hind limb). Age of the cow, dimensions of the stall, and type of bedding were factors found to be associated with lameness and skin lesions. This information was also used to create scores for different areas of welfare, such as stall management and hoof health, which ranged from 0 (not meeting expectations) to 100 (meeting/exceeding expectations). These scores were presented to producers through a web-based benchmarking system (www.benchmarkcowcomfort.com), developed as per the first objective, with the goal of motivating producers to make improvements in the welfare of their herd. Use of the website is promoted through dairy newsletters in the region.

To see if improvements were made, herds were reassessed approximately one year after the initial visits. Lameness within each herd was

decreased to 14%, and skin lesions over the hock were decreased to 37%, which appears to suggest that increasing producer awareness and allowing them to compare their results with their peers can help motivate them to make changes and improve the welfare of their herds. Although these welfare indicators were reduced during the study period, there is still room for improvement in the future.

Megan Jewell, the graduate student completing her PhD through this project, is currently writing her thesis.

ADDITIONAL COMPLETED PROJECTS—2018

INITIAL EVALUATION OF AN INJECTABLE ANESTHETIC FOR THE CASTRATION OF MALE PIGLETS UNDER FIELD CONDITIONS—PILOT PROJECT

S Hamilton, D Hurnik

RESEARCH AND TRAINING TO IMPROVE STALL DESIGN AND MANAGEMENT FOR BETTER COW WELFARE AND PRODUCTIVITY ON SMALLHOLDER DAIRY FARMS IN KENYA—PHASE 2

J VanLeeuwen, S McKenna, S Richards, G Gitau

IDENTIFICATION OF RISK FACTORS DURING BROILER TRANSPORTATION THAT INFLUENCE INJURY AND MORTALITY

M Cockram, C Revie

Please see pages 10 and 11 for publications and presentations resulting from the above projects.

NEW RESEARCH PROJECTS FUNDED 2019

ULTRASONIC VOCALIZATIONS: A NON-INVASIVE ETHOLOGICALLY RELEVANT TOOL TO ASSESS HOME CAGE WELFARE IN RATS

P Bernard

ANTHELMINTIC RESISTANT CYATHOSTOMES: A THREAT TO EQUINE WELFARE ON PRINCE EDWARD ISLAND

WB Stoughton, M Neilsen

DEVELOPMENT OF AN EQUINE NASOGASTRIC INTUBATION SIMULATOR AS AN AID OR ALTERNATIVE TO THE USE OF ANIMALS IN TEACHING

WB Stoughton, N Bressan



SERVICE

Service projects are generally carried out in cooperation with a community group, and provide direct benefits for animals as well as educational benefits for veterinary students. Please visit awc.upei.ca/Service_projects for more information.

CLINICAL CARE OF WILDLIFE AT AVC (2016–2018)

J Spears, O Raab

The AVC Wildlife Service, funded through the SJDAWC since 1999, continues to provide a broad array of services: clinical care for injured or abandoned wild animals, training for veterinary students, public education, and collaboration with wildlife agencies and centres. Over the last two years of this project, 497 wild animals were presented to the AVC by members of the public and by PEI Fish and Wildlife. This included multiple avian and mammalian species, with many of the mammals being red foxes, presented as a result of vehicle collisions.



Silver fox release, with student Rachael Speare (AVC class of 2020)

One of the most interesting species admitted to the Wildlife Service over the last two years was a Leach's storm petrel that was found on the deck of the Delta Hotel Prince Edward in downtown Charlottetown on November 3, 2017, after a stormy night. These small seabirds normally never come to shore except in nesting season, and then only on remote, inaccessible (to people) islands. The bird was cared for at AVC for three days, where it was fed by gavage needle a fish mixture with krill and salmon oil. The storm petrel was released on

the evening of November 6, 2017, in the dark to prevent predation. It flew away beautifully.

The Wildlife Service continues to provide extensive training at AVC to interns, fourth-year rotation students, and Wildlife Club volunteers, all of whom are vital to the ongoing care of the animals. Training is provided by Drs. Oriana Raab and Dave McRuer, and wildlife technician, Fiep de Bie. Ms. de Bie holds a master bander permit and a scientific rehabilitation permit from the Canadian Wildlife Federation. This allows birds coming through the AVC Wildlife Service to be banded before release.

The AVC Wildlife Service also provides presentations to students during the Dr. Tim Ogilvie AVC Vet Camp and AVC Summer Academy, to the UPEI Health and Safety Committee, to the public during National Wildlife Week, and by request to community groups. The media is always interested in wildlife releases, which provide another opportunity for public education.

The AVC Wildlife Service collaborates with the Canadian Wildlife Health Cooperative; federal Department of Fisheries and Oceans; Environment, Energy and Forestry Ministry of PEI, Marine Animal Response Society, and Magnetic Hill Zoo, as well as Parks Canada and the wildlife rehabilitation centres in the Maritimes: Cobequid Wildlife Rehabilitation Centre, Hope for Wildlife, and the Atlantic Wildlife Institute.

FUNDING RENEWED FOR SERVICE PROJECTS 2019

AVC HUMANE DOG TRAINING (2019–2020)
AM Carey, with the PEI Humane Society

FINANCIAL AID FOR SPAY OR NEUTER OF COMPANION ANIMALS OF OWNERS ON FIXED INCOME (2019–2021)
P Foley, with SpayAid PEI

NEUTERING FERAL CATS ON PEI (2019–2021)
P Foley, with PEI Cat Action Team

AVC WILDLIFE SERVICE (2019–2021)
O Raab

YOUTH TRAINING IN ANIMAL WELFARE IN KENYA AND CANADA—PART 4 (2019–2020)
J VanLeeuwen, S Richards, with Veterinarians Without Borders–Canada

OTHER CURRENT SERVICE PROJECTS

MEDICAL AND SURGICAL CARE OF HOMELESS ANIMALS (2018–2020)
H Gunn McQuillan, P Foley, R MacDonald, M MacLean, R MacLean, P Moak, with the PEI Humane Society

HEALTH MANAGEMENT SERVICES FOR HANDIBEAR HILLS EQUINE SANCTUARY INC (2017–2020)
T Muirhead, K MacMillan, G Conboy

PEGASUS FERAL CAT NEUTER PROGRAM (2019)
H Gunn McQuillan, K Ling, with the PEI Cat Action Team

PEGASUS HELPING HAND FUND (2019)
H Gunn McQuillan



2019 WINTER WELFARE WEBINAR SERIES: SMALL ANIMAL BEHAVIOUR

The SJDAWC's fourth annual "AVC Winter Webinars" were delivered by Karen Overall, MA, VMD, PhD, DACVB, Editor-in-Chief, *Journal of Veterinary Behavior: Clinical Applications and Research*, and Adjunct Professor, AVC. In these RACE-approved webinars, Dr. Overall addressed the following topics: "Behavioral and welfare concerns for rescued dogs" (February 12), "What do we know about common aggressions in dogs and cats?" (February 26), and "Emergent data in behavioural medicine: 10 findings that will change the way you think and practice" (March 12).

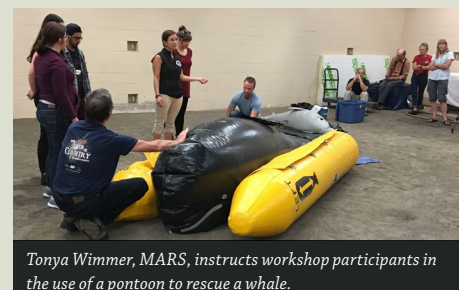
Registrations increased again this year, to over 600—up from 400 in 2018—from all over the world. Approximately half the registrants were veterinarians, animal health technicians, and trainers, and half were students (at no charge). Information about the 2020 webinars will be available at awc.upei.ca in the fall.



ANIMAL WELFARE IN PRACTICE SEPTEMBER 14–15, 2018 WHALE STRANDING

The fourteenth annual conference focused on whale stranding, with keynote speaker Dr. Michael Moore, Director, Marine Mammal Center, Woods Hole Oceanographic Institution, Massachusetts. Other speakers were Tonya Wimmer, Marine Animal Response Society, and Drs. Pierre-Yves Daoust and Art Ortenburger, Atlantic Veterinary College.

The speakers discussed the ways human activities affect marine wildlife, some attempts at mitigation, and how to respond to accidental entanglements. There was a practical workshop to demonstrate the type of training that MARS volunteers go through before responding to a real whale stranding. The workshop involved the use of an inflatable whale and dolphin, filled with air and water to simulate the weight and feel of real animals, which were stranded on the "beach" (the arena of the Veterinary Teaching Hospital). During the exercise, participants learned how to use a stretcher or an inflatable pontoon to transfer



animals, with emphasis on safety for both the whales and the human volunteers.

The conference was co-hosted by the SJDAWC and the AVC Animal Welfare; Exotics, Lab Animal and Wildlife; and Aquatics clubs, with support from the Animal Welfare Foundation of Canada. There were about 70 registrants: half were veterinary students and half were others from NB, PEI, NS, and Quebec, including veterinarians, marine biologists, and other personnel from the Canadian Wildlife Health Cooperative (CWHC), DFO, PEI Fisherman's Association, Grand Manan Whale and Seabird Research Station, MARS, and Parks Canada.

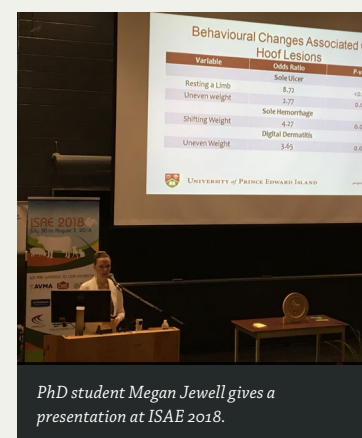
ISAE 2018

The 2018 Congress of the International Society for Applied Ethology (ISAE) was held at UPEI, supported by AVC and colleagues from Dalhousie University. Dr. Michael Cockram, Chair in Animal Welfare and Professor, Health Management, chaired the local organizing committee. The SJDAWC was a platinum sponsor of the conference.

Established in 1966, ISAE is the leading scientific society for the study of the behaviour and welfare of confined or domesticated animals, including companion, farm, zoo, and managed wild animals. The Congress provides an international forum for the presentation

and discussion of advances in applied animal behaviour science and animal welfare. Last held in Canada in 1996 at the University of Guelph, the conference at UPEI was only the fifth time that it has come to North America.

The 2018 Congress had 127 spoken and 110 poster presentations, with a wealth of interesting new results in the world of applied ethology, giving rise to lots of questions and discussions. There were 281 delegates (ethologists, veterinarians, animal scientists, and graduate students) from 29 countries, who enjoyed the beauty and hospitality of Charlottetown and PEI in mid-summer, as well as the comfortable conference setting of UPEI.





2019 SIR JAMES DUNN ANIMAL WELFARE GRADUATE SCHOLARSHIP AWARD WINNERS

Three scholarships were awarded this year:

Logan Bigelow, MSc (Canada)—two years funding as a doctoral student to work with Drs. P Bernard and J Spears on the project, “Ultrasonic vocalizations analysis: A non-invasive ethologically relevant tool to assess home cage welfare in rats.”

Mariana Fonseca, BVM, MVS (Brazil)—partial funding as a doctoral student to work with Drs. J Sanchez and L Heider on the project, “Assessment of antimicrobial stewardship on animal welfare, animal health and antimicrobial resistance on dairy farms.”

Madeleine Stein, BVM (United Kingdom)—two years funding as a masters student to work with Drs. M Evason and J McClure on the project, “Evaluation of pet-owner and veterinary knowledge, attitudes, and practices surrounding antimicrobial use and prescribing practices for companion animals in Canada.”

2018 CHRISTOFOR AWARD IN ANIMAL WELFARE

Fourth-year student **Natalie Wright** received the 2018 Christofor Award in Animal Welfare at the AVC Fall Awards Night in October for her long-standing efforts to improve the welfare of animals. Prior to attending AVC, while at Michigan State University, she participated in the Animal Welfare Judging and Assessment Contest (AWJAC). At AVC, she has been on the executive of the AVC Animal Welfare Club since her first year; has participated in the Animal Welfare Journal Club, feral cat neuter days, and the 2016 AWJAC; and, in 2018, established a liaison with the Humane Society Veterinary Medical Association as the first AVC student representative.

Natalie is particularly interested in food animal welfare and strives to incorporate both a veterinary and ethology (animal behaviour) viewpoint in evaluating animal welfare. She plans to carry this approach into her veterinary practice, with the possibility of undertaking a PhD in animal welfare in the future.



Amanda Youngblood, Natalie Wright, and Dr. Greg Keefe, Dean

DR. TOM A. W. TAYLOR SCHOLARSHIP

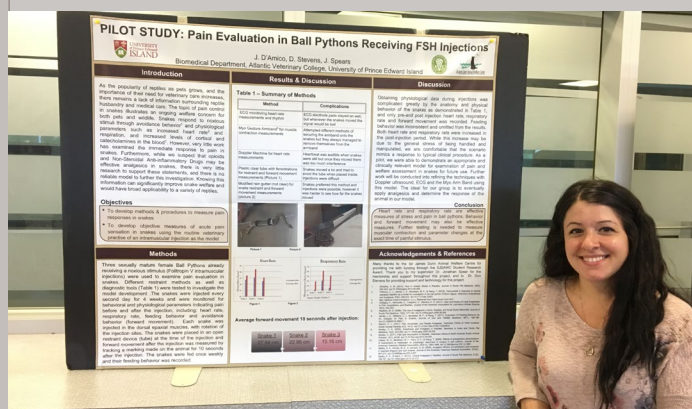
The 2018 scholarship was awarded to third-year student **Amanda Youngblood**. The scholarship is awarded in memory of Dr. Tom A. W. Taylor to a student who is well rounded and academically proficient, and has demonstrated initiative and interest in research activities. Amanda has a particular interest in wildlife/zoological/exotic animal medicine and behaviour, which she plans to pursue following receipt of her DVM degree in 2020.



Martin Mitchell (Ceva Santé Animale), Drs. Zhijuan Yin (China), Mactar Seck (Senegal), Alice Crook, Aldroaldo Zanella (Brazil), Charlotte Berg (Sweden), and Johnson Chiang (WVA President)

WORLD VETERINARY ASSOCIATION ANIMAL WELFARE AWARD

In 2018, Alice Crook received the award for North America as one of five winners of the World Veterinary Association Animal Welfare Awards, supported by Ceva Santé Animale. The ceremony took place in Barcelona, Spain, at the 34th annual World Veterinary Association Congress, where Dr. Crook and veterinarians from Brazil, China, Senegal, and Sweden were recognized for their work to promote best practices in animal welfare.



Jessica D'Amico and poster

SIR JAMES DUNN ANIMAL WELFARE SUMMER RESEARCH AWARD

This award is one of the Veterinary Summer Research Awards that provide funding for students to participate in the AVC Summer Research and Leadership Program, including production of a poster. **Jessica D'Amico**, AVC Class of 2020, received the 2018 SJD Award to work with Dr. Jonathan Spears on the project, “Efficacy of acute pain control in Ball pythons (*Python regius*).”

Andrew Cohen, AVC Class of 2022, received the 2019 SJD Award and is currently working with Dr. Paul Bernard on the project, “Ultrasonic vocalizations: A non-invasive ethologically relevant tool to assess home cage welfare in rats.”

CHINOOK PROJECT UPDATE

Dr. Marti Hopson, Veterinary Coordinator, Chinook Project (chinookproject.ca)



Dr. Mike West assists Veronica Ells with surgery while Heather Chandler monitors anesthesia.



The Chinook team pose with their supplies in the Nain fire hall.

In June 2019, the Chinook Project team travelled to Northern Labrador to provide free veterinary services in two locations—Nain (the northernmost community in Labrador), for a fifth visit, and Natuashish (moved from Davis Inlet in 2002), for a fourth visit, the first since 2015. Both communities have multiple positive rabies cases each year; in 2018, a canine distemper outbreak in Natuashish greatly affected the dog population.

The team spent 4.5 clinic days in each location, and saw animals for vaccinations, deworming, and spay/neuter surgeries, as well as many other procedures such as dentistry and eye surgery.

Approximately 150 medical appointments and 50 surgeries were performed. In Natuashish, members of the team visited the school to speak to youth about humane education topics and opportunities in animal sciences such

as the Dr. Tim Ogilvie AVC Vet Camp. The Chinook team is pictured above, including three veterinarians from AVC (Drs. Heather Gunn McQuillan, Peter Foley, and Mike West), Dr. Becky Jackson, Happy Valley-Goose Bay, and five fourth-year veterinary students: Bryan Welch, Ashley Kroyer, Heather Chandler, Veronica Ells, and Rachael Speare. More information about the Chinook Project can be found on Facebook and at www.chinookproject.ca

2018 ANIMAL WELFARE JUDGING AND ASSESSMENT CONTEST

Second-year student Alix Kusch and third-year students Colleen Griffin and Cortney Jones participated in the veterinary division of the 2018 Animal Welfare Judging and Assessment Contest at Colorado State University in November. The competition involved a live (staged) scenario to assess the welfare of polo ponies and determine whether they were fit to play in the next round of a polo match. Three individual paper-based scenarios required evaluation of data from two different farms or owners of dairy goats, egg-laying ducks, and green iguanas. The students were required to describe the positive and negative welfare aspects of each scenario, and then present an argument as to which farm or owner was providing better welfare before a panel of welfare experts and veterinarians with a specialty in each species under discussion.

According to the students: “Taking part in this contest allowed us to build confidence not only in our researching abilities but also in communicating information and presenting it within a limited time. The judges provided us with information on the different welfare topics before the competition and then, afterwards, discussed the major issues related to each scenario. We very much appreciated the guidance of our supervisor, Dr. Michael Cockram; our student mentor, Hanna Hone; and our specialist coach on the welfare of green iguanas, Dr. Jonathan Spears.”

Funding for the students’ expenses was provided through the SJDAWC Student Project Fund, the AVC Animal Welfare Club, the American Veterinary Medical Association, and the Universities Federation for Animal Welfare, UK.



Cortney Jones, Colleen Griffin, and Alix Kusch



LEGISLATION

FEDERAL

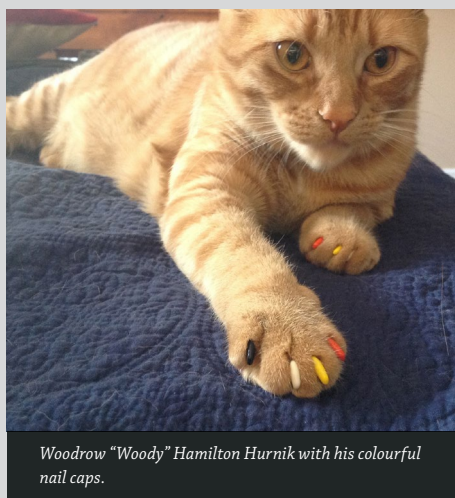
Three new pieces of federal legislation have recently been passed to improve protection for animals in Canada.

Bill C-84, An Act to Amend the Criminal Code (bestiality and animal fighting), broadens the previous definition of bestiality in the Criminal Code to make illegal any contact for a sexual purpose with an animal. Secondly, Bill C-84 expands the section on animal fighting to include as an offence promoting, training, receiving money for, or taking part in the fighting or baiting of animals, as well as training, transporting, or breeding of animals for fighting or baiting.

Bill S-203, the Ending the Captivity of Whales and Dolphins Act, bans the capture, keeping, or breeding of cetaceans, including whales, dolphins, or porpoises, unless the cetacean is currently in captivity or is being kept in the best interests of its welfare (i.e., receiving care or undergoing rehabilitation) or for scientific purposes, pursuant to the issuing of a license.

Bill C-68 amends the Fisheries Act to continue the ban on shark finning (illegal since 1994), but now the Act also bans the import and export of shark fins. Shark finning is the practice of cutting off a shark's dorsal fin and leaving the rest of the animal to die; the shark fin trade kills many millions of sharks globally each year.

UPDATE ON CAT DECLAWING IN CANADA



Woodrow "Woody" Hamilton Hurnik with his colourful nail caps.

Manitoba recently became the seventh province in Canada where veterinarians have approved a ban on the practice of partial digital amputation (PDA) in cats, commonly known as declawing, unless there is a medical reason. The practice, which involves surgical removal of the last bone (third phalanx—P₃) of a cat's toes, was banned in Newfoundland and Labrador, New Brunswick, and Alberta earlier this year, while Nova Scotia, British Columbia, and Prince Edward Island prohibited it in 2018. These bans follow the issuing of a revised position statement by the Canadian Veterinary Medical Association in 2017, which opposed the practice of partial digital amputation.¹

Scratching is a normal feline behaviour through which cats mark their territory

and which assists with whole-body stretching. Surgical amputation of P₃ alters normal weight bearing in cats, causes avoidable short-term acute pain, and has the potential to cause chronic long-term pain. A major retrospective study published in 2018 in the *Journal of Feline Medicine and Surgery*² showed that declawed cats were at higher risk for unwanted behaviours like biting and litterbox issues, as well as developing signs of back pain. There are many viable alternatives to PDA to address unwanted scratching behaviour, including frequent nail trimmings, scratching posts, and plastic covers placed over the cat's nails.

Elective (non-therapeutic) declawing of cats is also banned in the UK, Europe, Australia, New Zealand, several cities in California, and, most recently, the state of New York. Therapeutic (medical) reasons for which a veterinarian might recommend toe amputation include a tumour, severe infection, or a traumatic injury.



Smee Crook uses a scratching apparatus. Individual cats may prefer a horizontal or vertical surface.

¹ <https://www.canadianveterinarians.net/documents/partial-digital-amputation-onychectomy-or-declawing-of-the-domestic-felid-position-statement>

² Martell-Moran NK, Solano M, Townsend HG. Pain and adverse behavior in declawed cats. *Journal of Feline Medicine and Surgery* 2018; 20(4):280-288. <https://journals.sagepub.com/doi/full/10.1177/1098612X17705044>

ANIMAL WELFARE JOURNAL CLUB

The club, a joint initiative of the SJDAWC and the AVC Animal Welfare Club, meets approximately monthly to discuss animal welfare-related scientific articles in such areas as animal welfare science, ethics and behaviour, and ethical veterinary practice. The club is open to all faculty, staff, and students at UPEI.

Here are a few of the articles discussed in recent months:

- 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>
- Fawcett A, Mullan S, McGreevey P. 2018. Application of Fraser's "Practical" ethic in veterinary practice, and its compatibility with a "One Welfare" framework. *Animals* 8:109-126. <https://doi:10.3390/ani8070109>
- Makowska IJ, Weary DM. 2016. The importance of burrowing, climbing and standing upright for laboratory rats. *Royal Society Open Science* 3:160136. <http://dx.doi.org/10.1098/rsos.160136>

PEI COMPANION ANIMAL WELFARE INITIATIVE (CAWI)

CAWI exists to improve the welfare of companion animals on PEI through various strategies, including raising public awareness about good animal care practices through bi-monthly articles (“Animal Talk”) in *The Guardian* newspaper, and occasional features on CBC radio (“Pets and People”). Recent topics include “Dog park etiquette 101” (Marla Somersall, July 24, 2019) and “No such thing as a ‘beginner pet’” (Connor Richardson, May 29, 2019). Articles and radio features are available at www.princeedwardisland.ca/CAWI. Members of CAWI are the PEI Department of Agriculture and Fisheries, SJDAWC, PEI Humane Society, SpayAid PEI, PEI Cat Action Team, and the PEI Veterinary Medical Association.

AVC ANIMAL WELFARE CLUB

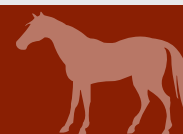
Jessica D’Amico, AVC Class of 2020, immediate past president, AVC Animal Welfare Club

The AVC Animal Welfare Club promotes animal welfare at the AVC and beyond by providing veterinary students, veterinarians, producers, and community members with opportunities to expand their knowledge of animal welfare. In 2018, the club co-hosted, in collaboration with the SJDAWC and the Exotics, Lab Animal and Wildlife and Aquatics Clubs, the 14th annual Animal Welfare in Practice conference on whale stranding (page 6). The club also awarded eight grants to AVC students pursuing external rotations related to animal welfare, and assisted three students to participate in the annual Intercollegiate

Animal Welfare Judging and Assessment Competition in Colorado. Throughout the year, the AVC Animal Welfare Club hosted or cohosted several lunchtime lectures on topics such as veterinary forensics, assessing welfare scenarios for prosecution in a court of law, and animal protection laws.

The club welcomes Kendall Wyman, AVC Class of 2022, as its new president. You can find the club’s page on Facebook. The club is grateful to the Animal Welfare Foundation of Canada for its ongoing support.

GRADUATE STUDENT NEWS



RECENT PUBLICATIONS

- Brockhoff E, Brown J, Cockram M, Crowe T, Faucitano L, Haley D, Schwartzkopf-Genswein K, Schwan-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. 2019. Risk factors for bruising and mortality of broilers during manual handling, module loading, transport, and lairage. *Canadian Journal of Animal Science* 99(1):50-65.
- 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.
- 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 and Appendix 8 P379-404.
- 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. Ethology for Health and Welfare. University of Prince Edward Island, Charlottetown, PEI. Edited by Wageningen Academic Publishers, The Netherlands.
- Jewell MT, Cameron M, Spears J, McKenna SL, Cockram MS, Sanchez J, Keefe GP. 2019. Prevalence of lameness and associated risk factors on dairy farms in the Maritime Provinces of Canada. *Journal of Dairy Science* 102(4):3392-3405.
- Jewell MT, Cameron M, Spears J, McKenna SL, Cockram MS, Sanchez J, Keefe GP. 2019. Prevalence of hock, knee, and neck skin lesions and associated risk factors in dairy herds in the Maritime Provinces of Canada. *Journal of Dairy Science* 102(4):3376-3391.
- Kathambi EK, VanLeeuwen 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.
- Kathambi EK, Vanleeuwen JA, Gitau GK, Kamunde C. 2019. Risk factors associated with cow lying time, and stall and cow cleanliness in smallholder dairy farms in Kenya. *Veterinary World* 12(7):1085-1092.
- Richards S, Vanleeuwen JA, Peter G, Kamunde C, Uehlinger F, Wichtel JJ. 2019. Associations between nutritional supplementation and subclinical mastitis and reproduction in dairy cows on smallholder dairy farms in Kenya. *Livestock Research for Rural Development* 31(6):80.

PRESENTATIONS

- Cockram M. 2018. Transport of broilers. Atlantic Poultry Conference, Wolfville, NS.
- Crook A. 2018. Animal Abuse: Effective Veterinary Response. Congrès vétérinaire québécois, Saint-Hyacinthe, QC.
- Crook A. 2018. Animal Welfare: A Life Worth Living. Congrès vétérinaire québécois, Saint-Hyacinthe, QC.
- Crook A. 2018. Welfare-friendly Veterinary Practice. Congrès vétérinaire québécois, Saint-Hyacinthe, QC.
- Crook A. 2019. Presentation on behalf of the Canadian Veterinary Medical Association (CVMA) to the House of Commons Standing Committee on Justice and Human Rights with respect to its hearing on Bill C-84, An Act to Amend the Criminal Code (bestiality and animal fighting). April, Ottawa.
- Crook A. 2019. Presentation on behalf of the CVMA to the Senate Committee on Social Affairs, Science and Technology with respect to its hearing on Bill C-84, An Act to Amend the Criminal Code (bestiality and animal fighting). June, Ottawa.
- Crook A. 2019. Update on cat declawing in Canada: The times they are a-changin'. AVC Animal Welfare Club, March, Charlottetown, PEI.
- Crook A. 2019. Update on cat declawing in Canada. Panel discussion at the National Animal Welfare Conference, Humane Canada, April, Montreal.
- 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.
- 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*)
- 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. (*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.
- 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.
- 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, Vanleeuwen JA, Gitau GK, Revie C, Kamunde C. 2019. Assessment of farmers' compliance to implement cow comfort changes recommended, and their effects on lying time, stall and cow cleanliness on smallholder dairy farms in Kenya. KVA conference, Kisumu 2019.
- Kathambi EK, VanLeeuwen 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, VanLeeuwen JA, Kairu WS. 2018. Seroprevalence of bovine leukosis virus in contrasting farming systems in Kenya. Kenyan Veterinary Association conference, Nyeri, Kenya.
- Kathambi EK, VanLeeuwen 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.
- Kathambi EK, VanLeeuwen 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.
- Kathambi EK, VanLeeuwen JA, Gitau GK, Revie C, Kamunde C. 2018. Factors associated with lying time, and cow and stall cleanliness on smallholder dairy cows in Kenya. GSR Days, Charlottetown.
- Kimeli P, Makau D, VanLeeuwen JA, Gitau GK, McKenna SL, Heider LC. 2018. Factors associated with cow leg hygiene on smallholder dairy farms in Kenya. GSR Days, Charlottetown.
- Richards S, VanLeeuwen 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.

CONGRATULATIONS to the following students who successfully defended their theses in 2018.



KIM FOOTE

- MVSc dissertation: Assessing microscopic area and sample volume of equine bronchoalveolar lavage fluid



EMILY KATHAMBI

- MSc dissertation: Calf comfort pilot study and compliance and effects of cow comfort recommendations on smallholder dairy farms in Kenya

SPOTLIGHT ON LONGSTANDING SUPPORTER GLENN LORANGER AND LUKE



Above: Glenn Loranger and Luke

Right: Luke at school



This summer marks 20 years that AVC and the SJDAWC have benefited from the generous support of Halifax resident, Glenn Loranger. Glenn's dog, Luke, who celebrated his 10th birthday this summer, and Glenn's previous dog, Chance, have received care in the past from AVC's Veterinary Teaching Hospital.

Glenn is a retired nurse who, since his retirement, has worked as casual relief staff and volunteered with mental health and addictions at the IWK Health Centre in Halifax, as well as IWK Youth Forensic Services in the Annapolis Valley. Luke often joins him to visit young people in forensics and in detention. Luke also volunteers at the NS Community College in Dartmouth and at the Cavalier Elementary School in Lower Sackville, where he participates in the "See Spot Read Program," through which children with reading difficulties read to him in a reassuring environment. Luke also assists some children on the autism spectrum.

Glenn and Luke also visit the local library where Luke helps with the after-school program. Glenn says that Luke has the better social life of the two, but it is easy to see that they both contribute extensively to their community, and that they both very much enjoy doing so! Thank you very much, Glenn, for your longstanding and ongoing support of the SJDAWC.

Many thanks TO OUR SUPPORTERS!

We gratefully acknowledge the sustained financial support of The Christofor and The Sir James Dunn Foundations, without which the SJDAWC would not exist.

We also thank the following organizations and individuals who have supported the SJDAWC within the last three years (and some for much longer than that):

- Pegasus Fund Neuter Program and Pegasus Helping Hand Fund: The Pegasus Family Foundation, through the Silicon Valley Community Foundation
- Pegasus Helping Hand Fund: Dr. Christine Savidge, AVC Classes of 2011 and 2001
- The Atlantic Veterinary College
- 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
- Feral cat neutering projects: Zoetis Canada; Iams and Eukanuba
- Glenn Loranger and Luke
- Derek Mathers
- Andrea and Arthur Hill
- In memory of clients' companion animals: Fairview Animal Hospital; Vetcetera Animal Hospital
- Universities Federation of Animal Welfare, UK
- The late David Madren
- The late Kay Alexandor
- Anonymous

We are also grateful to the many generous individuals, veterinary hospitals, and other businesses, too numerous to mention, who have made a donation in memory of a beloved pet.

All donations are fully tax deductible.

To learn how you can support the SJDAWC, go to upeil.ca/awc or write to:

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The Sir James Dunn Animal Welfare Centre
Atlantic Veterinary College, UPEI
550 University Avenue, Charlottetown,
Prince Edward Island, Canada C1A 4P3