

SJDAWC NEWS

NUMBER 36, 2020 FALL EDITION

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



PROMOTING ANIMAL WELFARE THROUGH RESEARCH, SERVICE, AND EDUCATION



UNIVERSITY
of Prince Edward
ISLAND



The 2019 Animal Welfare in Practice symposium showcased presentations about dairy cow welfare assessment. The speakers discussed the research behind animal welfare assessments, and practical methods for measuring welfare on dairy farms across Canada. In addition to the talks, the conference included an interactive session, involving all three presenters, about steps that dairy farmers can take to prepare for an animal welfare assessment, and what they can do after the assessment.

Speakers' presentations from this and past symposia can be found on our website: awc.upei.ca/animal-welfare-in-practice/



ANIMAL WELFARE IN PRACTICE: ANIMAL ABUSE AND NEGLECT MARCH 2021

Every fall, the SJDAWC holds an Animal Welfare in Practice symposium for students and veterinarians to learn about various animal welfare topics. Due to restrictions related to COVID-19, the symposium planned for this fall has been delayed until the spring of 2021. The topic will be veterinary response to animal cruelty, abuse, and neglect,

including lectures from experts in the field, as well as case studies where participants work through real-world scenarios.

The symposium will be held as either a virtual or a "hybrid" event with some in-person activities, depending on public health recommendations at the time. Stay tuned to find out more!

FALL 2020 WEBINARS



Dr. Katy Proudfoot and Sherri Pineau

DIRECTOR'S CORNER

This year has been challenging for all of us as we each navigate our “new normal.” My new normal has been working mainly from home, which has led me to realize that much of my job can be done at a desk. For many others, including the veterinarians who work in our hospital, reality has been much different. Despite all of the changes this year has brought us, the SJDAWC continues to pursue research and service projects that improve the welfare of animals. In this issue, you will find our latest news, including our re-scheduled fall webinar series, projects that have ended, and new ones that have begun.

This newsletter would not be possible without the help of the new SJDAWC administrative assistant, Sherri Pineau, pictured above.

Sherri and I would like to take this opportunity to show our appreciation for Dr. Alice Crook, former coordinator of the SJDAWC. Although officially retired, Dr. Crook has been “on call” to help us when we needed it. She has been a wonderful mentor as we have transitioned into new roles and moved forward. Hers will truly be hard shoes to fill!

We welcome your feedback at animalwelfare@upepei.ca. Please contact us at animalwelfare@upepei.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 upepei.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.



The SJDAWC was fortunate again this year to have Dr. Karen Overall, MA, VMD, PhD, DACVB, present three webinars for our annual webinar series. Now in its fifth year, the series continues to attract attention from veterinarians and students from around the world. The series would normally occur in the winter but was rescheduled this year to take the place of the annual Animal Welfare in Practice symposium now scheduled for the spring of 2021.

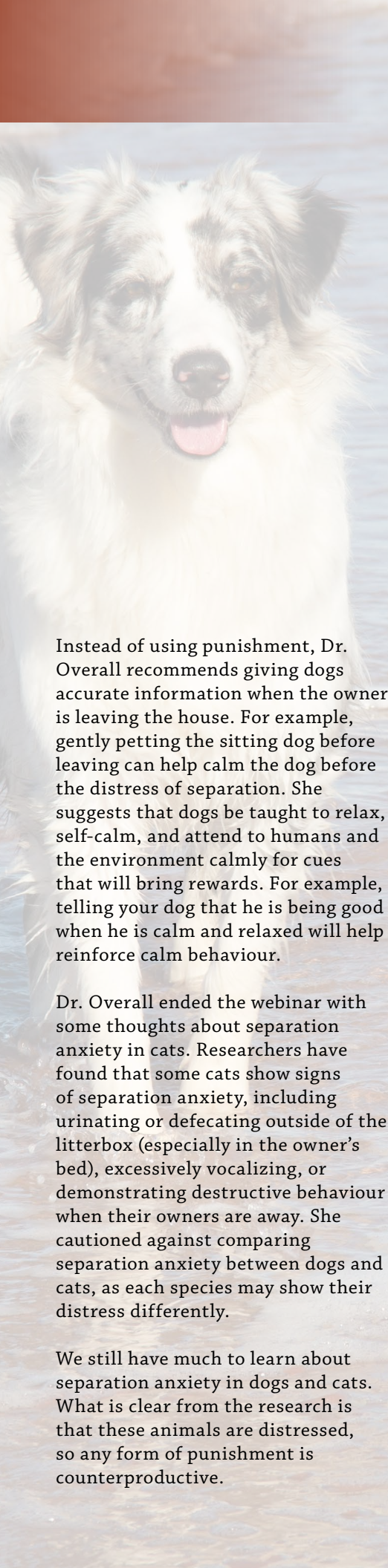
This year, Dr. Overall covered three important topics in veterinary behavioural medicine. Below is a summary of some of the main take-home messages from these topics.

WEBINAR 1: Attachment in cats and dogs: What can the data tell us?

In the first webinar, Dr. Overall described the theory of attachment in humans, and discussed whether this theory is applicable to dogs and cats showing signs of separation anxiety. “Separation anxiety” occurs when dogs or cats show signs of physical, behavioural, and emotional signs of distress when separated from their owner. In dogs, this can mean barking or destructive behaviour, or other subtle behaviours like excessive panting.

Researchers have sought to test if dogs that are “hyper-attached” to their owners—for example, always following them—show more signs of anxiety when separated. It appears that this is not likely the case. Instead, separation anxiety in dogs may actually be more about distress than attachment.

These findings call into question old recommendations for treating separation anxiety based on the idea of “breaking the attachment” between pet and owner. For example, an owner may be asked to ignore the dog when returning home or when leaving, or when the dog attempts to seek attention. Dr. Overall explained that these strategies may cause more harm than good, as the dog likely views these behaviours as punishment. Regardless, they would certainly worsen any distress experienced by the dog.



WEBINAR 2: We want treatment to be humane, but shouldn't treatment "work"?

The second webinar examined efficacy data for medications, diets, and nutraceuticals commonly recommended for canine behavioural problems. Most nutraceuticals lack any data supporting their effect on canine behaviour, and some have none. Some of the newer prescription diets may have excellent effects for targeted behavioural concerns (e.g., brain aging). The only truly good data for efficacy for serious problems comes from licensed pharmaceuticals.

Dr. Overall described a general plan for "patient-centred" humane care for companion animals brought to veterinary clinics for behavioural medicine interventions:

- First, she recommended that veterinarians and owners refrain from using scary or abusive interventions, including punishment in the clinic or at home.
- Second, she recommended protecting the patient, as they are often emotionally and mentally fragile, and have very specific needs that need to be attended to.
- Third, she recommended modifying the physical and social environment in the clinic so the patient is less reactive, better able to learn new things, and participate in their own recovery strategies.
- Finally, she recommended modifying the animal's emotional state. We do not want our pets to merely hide their distress behaviour, but instead we want them to be able to learn adaptive skills that can help them recover. Strategies to reach this final recommendation include behaviour modification as well as effective medications that have been shown to improve behavioural and emotional responses in pets.

Instead of using punishment, Dr. Overall recommends giving dogs accurate information when the owner is leaving the house. For example, gently petting the sitting dog before leaving can help calm the dog before the distress of separation. She suggests that dogs be taught to relax, self-calm, and attend to humans and the environment calmly for cues that will bring rewards. For example, telling your dog that he is being good when he is calm and relaxed will help reinforce calm behaviour.

Dr. Overall ended the webinar with some thoughts about separation anxiety in cats. Researchers have found that some cats show signs of separation anxiety, including urinating or defecating outside of the litterbox (especially in the owner's bed), excessively vocalizing, or demonstrating destructive behaviour when their owners are away. She cautioned against comparing separation anxiety between dogs and cats, as each species may show their distress differently.

We still have much to learn about separation anxiety in dogs and cats. What is clear from the research is that these animals are distressed, so any form of punishment is counterproductive.

WEBINAR 3: What's new, hot, and important in veterinary behaviour and behavioural medicine literature?

In the final webinar, Dr. Overall reviewed some of the new and exciting literature on veterinary behavioural medicine. For example, researchers in Finland have recently found two different sets of genes linked to fearfulness in German Shepherds and Great Danes. This information may help us to better identify and treat animals at risk of fear-related pathologies.

In another example, Dr. Overall discussed the idea that cats are often thought to be asocial and independent beings that may not require much attention from their owners. Recent research from Oregon State University has found that this may not be the case. In a study comparing shelter cats to owned cats, researchers found that shelter cats pay a lot more attention to, and seek attention from, unfamiliar people compared to pet cats. These results suggest that cats are not so well adapted to isolated, asocial environments, and that they value our company more than we may think.

Dr. Overall encouraged veterinarians to seek out new research using open-source journals and search engines available to anyone. Sites like *ScienceDirect.com* allow them to customize topics of interest and access lists of relevant publications, many of which are available to anyone at the click of a mouse.

For questions about separation anxiety and other behaviours in their pets, owners should talk to their veterinarian about treatment options. Veterinarians with questions about veterinary behavioural medicine may email Dr. Overall at koverall@upei.ca. People who have a dog, cat, horse, or other animal that needs behavioural help may email AVCBehaviouralMed@upei.ca for appointment information.

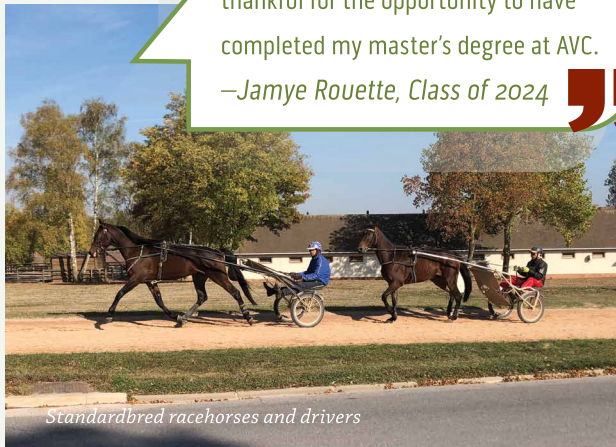
To view previous webinars hosted by the SJDAWC, please visit our new YouTube channel at www.upei.ca/youtube/awc

HIGHLIGHTS FROM THE PAST YEAR

STUDY FINDS RISK FACTORS FOR INJURIES IN RACE HORSES

As part of her master of science research under the supervision of Dr. Kathleen MacMillan, Jamye Rouette observed Standardbred racehorses on PEI during training and racing to identify risk factors for musculoskeletal injuries.

Musculoskeletal injuries are a source of pain and discomfort in Standardbred horses used in harness racing, and an important contributor to poor performance and wastage. Significant risk factors identified included the speed at which the horse is trained, previous injury, and conformational faults of offset knees and pelvic asymmetry. The results provide useful information for potentially



Standardbred racehorses and drivers

“ The generous funding provided by the SJDAWC made my project and studies possible, and I am beyond thankful for the opportunity to have completed my master’s degree at AVC.
—Jamye Rouette, Class of 2024 ”

improving and guiding management practices in Standardbred racehorses.

Jamye successfully defended her degree in March 2020, and is currently following her passion for animal health and welfare by continuing her education at AVC as a DVM student.

DO COMMON VETERINARY PROCEDURES CAUSE STRESS IN HORSES?

For her master of science degree, Anam Hanza, with the help of her supervisor Dr. Laurie McDuffee, conducted a research project to determine the extent to which horses experience stress when exposed to routine hospital procedures. Anam compared known physiological parameters of stress (heart rate and heart rate variability, as well as salivary cortisol) with behavioural assessments of stress to determine if any patterns existed between the two. She found that some veterinary procedures do cause stress in horses, and the horses’ behaviour can indicate when they are experiencing

physiological stress responses. These findings can help handlers in the hospital identify and mitigate stress in their equine patients.

Anam successfully defended her degree in August 2020, and has started her first year in the DVM program at AVC.

“ I found some surprising patterns between equine behaviour and their physiological stress responses and determined that it is likely that horses do experience increased stress in a hospital setting.
— Anam Hanza, Class of 2024 ”



Dr. Michelle Tuma, clinic team leader, with dogs at one of the 2020 VWB veterinary clinics in Cambridge Bay

NEW SERVICE PROJECT FOCUSES ON ANIMALS IN NORTHERN CANADA

The SJDAWC contributed to the funding pool for Veterinarians without Borders-Canada (VWB) to successfully implement four One Health-based temporary veterinary clinics in communities in the Northwest Territories (NWT) and Nunavut in 2020. A total of 244 dogs and cats received spays/neuters, vaccinations, and/or deworming so far in 2020. Their owners and other community members participated in health and welfare management training activities. At least two more communities will benefit from VWB temporary clinics in 2020. COVID-19 regulations meant that VWB volunteers were sourced from NWT. VWB also plans to identify and train a community animal health worker in at least two of the communities, who will connect with veterinarians elsewhere in Canada through electronic communications and telemedicine. Over 3,400 people in the four communities have healthier pets with improved animal welfare, leading to more sustainable pet populations and community health.

OTHER NEW AND RENEWED PROJECTS FUNDED IN 2020

Assessment and prevention of pain related to udder engorgement in dairy cows

S McKenna, K Proudfoot, G Keefe, A Muckle

This new research project aims to use novel methods to measure and reduce pain associated with udder engorgement in dairy cows.

Working donkey welfare assessment and owner education in Meru County, Kenya (pilot)

M Mellish

This new pilot project aims to evaluate the welfare of donkeys and promote an economical harness specifically designed to improve comfort for donkeys used as draft animals.

Understanding the natural behaviour and stress response of newborn dairy calves

K Proudfoot and S McKenna in partnership with R Meagher and M Gordon from Dalhousie University

This new research project aims to determine if newborn dairy calves will seek a hiding space in a barn as they would in nature, and if the provision of a space to hide will reduce stress in the first few days of life.

Prevention of bovine mastitis through a combination of cow comfort and mastitis interventions on smallholder dairy farms in Kenya

J VanLeeuwen, L Heider, G Keefe, S McKenna, E Kariuki, G Gitau

This new research project aims to determine practices that influence cow comfort and mastitis on smallholder dairy farms in Kenya.

AVC humane dog training program

AM Carey in partnership with the PEI Humane Society

This renewed service project aims to enrich the lives of shelter dogs by providing training, socialization, and contact with veterinary student trainers.

2019 ANIMAL WELFARE ASSESSMENT CONTEST

AVC students Kendall Wyman, Jess Rose, Christine Engel, Lindsey Bailey, and Nima Morady participated in the 2019 Animal Welfare Assessment Contest at Colorado State University last November. The contest covered animal welfare concerns related to broiler chickens, laboratory zebrafish, African painted dogs, and sheep. Funding for the students' expenses was provided through the SJDWC Student Project Fund, American Veterinary Medical Association, Universities Federation of Animal Welfare, and UPEI Student Union.

This year, the Animal Welfare Assessment Contest will be held virtually on November 21-22, and will cover cheetahs and turkeys. Email animalwelfare@upeil.ca, or visit www.awjac.org to find out more!

“ This experience not only allowed me to learn so much about assessing welfare, but it also provided me the opportunity to meet some welfare pioneers. I would do it again in a heartbeat. ”
 – Nima Morady, Class of 2023



Kendall Wyman, Jess Rose, Christine Engel, Lindsey Bailey, and Nima Morady

2020 SJDAWC SUMMER RESEARCH AWARD

Robyn Pimm, Class of 2023, was the recipient of the 2020 SJDAWC Veterinary Summer Research Award, which provides funding to support undergraduate veterinary students interested in animal welfare. Robyn worked in Dr. Paul Bernard’s lab this summer, analyzing rat ultrasonic vocalizations (USVs) as a means of assessing laboratory rat welfare. Specifically, she assessed the impact of single-level vs. double-decker tiered cages on USVs. Additionally, a portion of her project focused on refining previously defined USV call classification criteria in order to reduce variability.

Robyn presented posters virtually at the National Veterinary Scholars Symposium and the AVC Summer Research and Leadership Program. SJDAWC would like to congratulate Robyn for winning first for the best poster at the AVC SRLP poster session!



“ As an avid animal lover, I find it really rewarding to know my work is going towards optimizing housing conditions and ultimately reducing stress of (laboratory) animals!
 —Robyn Pimm, Class of 2023 ”



Robyn Pimm working from home due to COVID-19

2019 CHRISTOFOR AWARD IN ANIMAL WELFARE

Last year, fourth-year student Jessica D’Amico received the Christofor Award in Animal Welfare for her activities to improve the welfare of animals. She has been the president of the AVC Animal Welfare Club, the wildlife representative for the AVC Exotics/Lab Animal/Wildlife Club, and a peer helper on the AVC Wellness Committee. When Jessica graduates, she plans to work in a private practice with small animals and pocket pets, as well as expand her involvement in animal welfare. In future, she hopes to own a private practice and possibly open a wildlife centre.

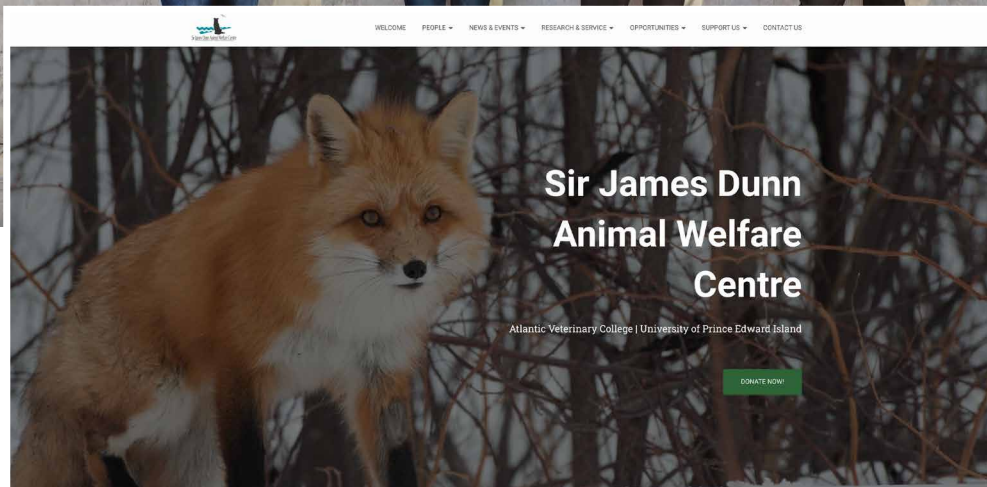
2019 DR. TOM A. W. TAYLOR SCHOLARSHIP

The 2019 Dr. Tom A. W. Taylor Scholarship was awarded to third-year student Kyrsten Landry. Established in memory of Dr. Tom A. W. Taylor, this award is given to a student who is well rounded and academically proficient, and has demonstrated initiative and interest in research activities. Kyrsten has a particular interest in small animal medicine and wildlife medicine, which she plans to pursue after she completes her DVM degree in 2021.



Jessica D’Amico, winner of the 2019 Christofor Award in Animal Welfare; Dr. Alice Crook, former SJDAWC coordinator; and Kyrsten Landry, recipient of the 2019 Dr. Tom A. W. Taylor Scholarship

THE SJDAWC IS GOING SOCIAL!

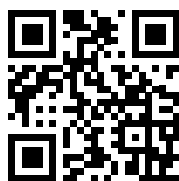


Christine Boucher and Ringo

This summer, Christine Boucher, Class of 2023, helped the SJDAWC become more engaged with veterinary students and the local community as part of her Dr. Tim Ogilvie AVC Vet Camp project. With Christine's help, we updated our website and created a new YouTube channel. We will soon launch a new Facebook page. We hope that these endeavours will help us stay better connected with you. We are always open to hearing your feedback!

Visit our newly designed website to donate to the Centre, and find out about the latest news, events, and opportunities provided through the SJDAWC.

awc.upei.ca



YouTube

Visit our YouTube channel to access previous webinars, and stay tuned for more content to be added soon.

upei.ca/youtube/awc



Our new Facebook page will launch in 2021, a one-stop shop for all the latest news and events from the SJDAWC.

SUPPORTER SPOTLIGHT

PEGASUS FAMILY FUND OF SILICON VALLEY COMMUNITY FOUNDATION



Pegasus the Counselor

For years the SJDAWC reports have told of “support from the Pegasus Family Fund of Silicon Valley Community Foundation”. The Fund was set up by an animal-loving couple who live in California, who wish to remain anonymous. He, a surgeon, and she, a teacher of international folk dance, have had a vacation home in PEI since 1990, returning each summer. The summer of 1993, about to leave PEI, they found a kitten who had been abandoned on their property. They flew him back to California, home to their other cats. Named Pegasus, he lived with them in California until his death at age 9 from complications of cardiomyopathy in 2002.

Wishing to honor his memory, they established a donor-directed family foundation named

after him. Desiring to give back to PEI what it had given them, they contacted Dr. Alice Crook, then coordinator of the SJDAWC at AVC, asking how they could help animal welfare on the Island. The result has been two ongoing programs since 2004: the Feral Cat Neuter program, in which fourth-year vet students, supervised by faculty, neuter feral cats brought to AVC by members of the Cat Action Team each week, and the “Helping Hands” program, which provides financial assistance to pet owners who are unable to fully fund the cost of needed care. In 2019 the Fund also sponsored the first (of many, they hope) webinar on the commonality of human and pet disease, broadcast to all Canadian vet schools and the Maritime medical schools. The Fund has also supported PEI Humane Society and Cat Action Team for years.

We wanted to crow about 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 in the last year:

- Pegasus Fund Neuter Program and Pegasus Helping Hand Fund: The Pegasus Family Foundation, through the Silicon Valley Pegasus Project
- Atlantic Veterinary College
 - In memory of clients’ companion animals: Fairview Animal Hospital; Vetcetera Animal Hospital
 - Feral cat neutering projects: Zoetis Canada
- Chinook Project: Rathlyn Foundation, Ann McCain Evans, Atlantic Veterinary College, Zoetis Animal Health, Boehringer-Ingelheim, Government of Newfoundland and Labrador, Veterinarians without Borders, and the Victoria Kennel Club
- Universities Federation of Animal Welfare, UK
- Andrea and Arthur Hill
- Drs. Stephen and Tina McCarthy
- Glenn Loranger
- Derek Mathers
- 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:

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