



Parks
Canada

Parcs
Canada



UNIVERSITY
of Prince Edward
ISLAND



Parks Canada-PEI & UPEI

Overview of Partnering Initiatives

1. School of Climate Change and Adaptation
2. Faculty of Sustainable Design Engineering
3. Faculty of Science – Biology
4. Faculty of Veterinary Medicine – Atlantic Veterinary College
5. Faculty of Science – Environmental Studies
6. Other Engagement and Learning
7. Ongoing and Future Collaboration Opportunities

A Rewarding Partnership



Parks
Canada

Parcs
Canada

The University of Prince Edward Island (UPEI) has a proud history and reputation of excellence in its academic programs, research, and engagement with community and industry partners. Through our ongoing collaborations between UPEI and Parks Canada, together we have contributed in important ways to the protection and preservation of Canada's natural and cultural heritage.

Internships, on-site learning placements, and community partner projects have helped undergraduate students meet the requirements of their program while also giving opportunities to learn more about the type of work available with Parks Canada. Students gain valuable experience working on initiatives and projects that have real-world applications as well as closely relating to their studies.

Undergraduate and graduate students have participated in meaningful research projects that create new knowledge in areas such as climate change and adaptation and species at risk, among others. Discoveries made by UPEI students are helping Parks Canada meet its conservation objectives and maintain the ecological integrity of the province's beautiful PEI National Park.

This report provides a summary of recent collaborations between Parks Canada and UPEI. These highlight the many positive impacts in the broader community. We are grateful to Parks Canada and look forward to continuing our successful collaborations.

Greg F. Naterer, PhD, P.Eng.
Vice-President, Academic and Research
University of Prince Edward Island

As we meet to reflect on the collaborations of the last year, 2025 marks the 10-year anniversary of Parks Canada-PEI's formal partnership with the University of Prince Edward Island (UPEI). Throughout the past decade, we have been fortunate enough to host and engage with many enthusiastic and promising students as they learn the values of protected area stewardship. We are thrilled to have the opportunity to reflect upon the many success stories that stem from this long-standing and fruitful collaborative effort.

Our long-running partnership has created numerous positive and mutually beneficial impacts for our organizations, our respective staff and – most importantly – for UPEI students. We have shared in the efforts and reaped the shared rewards. Many students who have completed hands-on research and learning opportunities in Parks Canada-administered places have gone on to find careers in their fields; some students have even made their way to employment within Parks Canada-PEI.

Although our partnership with UPEI has already led to many inspiring success stories, Parks Canada-PEI is excited to see what new opportunities await on the horizon. There's no doubt that the bright students at UPEI will continue to embody the values of stewardship, and we look forward to what our collective futures hold.

Géraldine Arsenault
Field Unit Superintendent
Parks Canada, Prince Edward Island

1. School of Climate Change and Adaptation

Extreme weather event monitoring in living labs

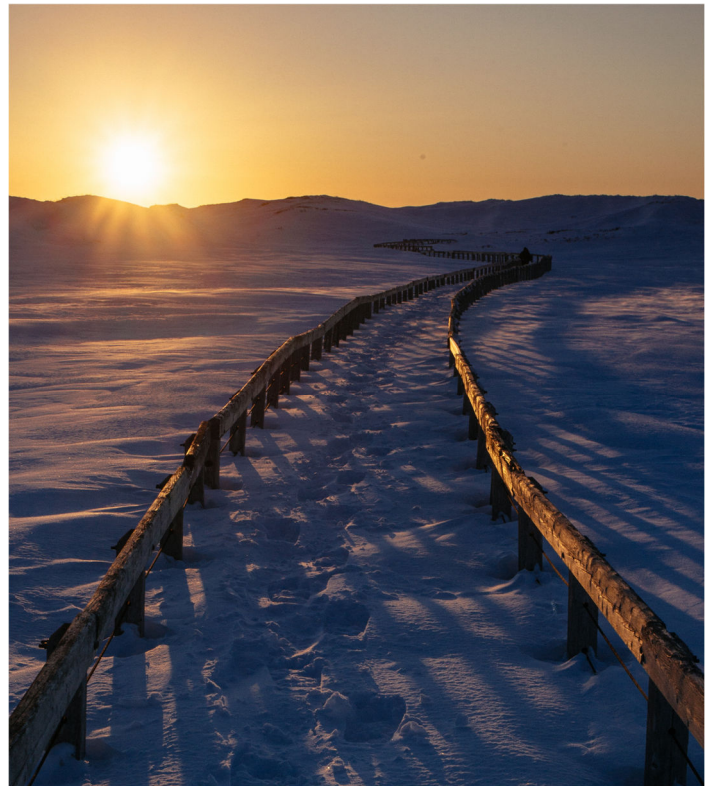


Parks Canada and the UPEI School of Climate Change and Adaptation continue to work together in monitoring weather patterns along the coastal areas of PEI National Park. The data gathered is co-managed for analysis, application, and integration into both organizations' initiatives. Students have made use of long-term ecological integrity monitoring datasets, examined the effects of climate change on Canada's protected heritage areas, and explored potential on-the-ground adaptation solutions.

The UPEI Climate Lab conducts coastal erosion and extreme weather event monitoring and has two active research permits in PEI National Park. Parks Canada staff provide general repair and maintenance support for weather stations throughout the park. Parks Canada also supported PhD candidate research (will be ongoing into 2025) studying the effects of storm induced changes to Piping Plover breeding habitat, through research permits and access to our long-term data sets on Piping Plover breeding success and productivity for the Atlantic Region.

Through collaborative research and a staffed presence on-site, Parks Canada staff and faculty and staff from the Centre continue to work in strengthening links and exploring collaborative initiatives. This year, a Park ecologist presented to the *Climate Impact on Biodiversity and Ecosystems*

class to provide an overview of the work conducted by Parks Canada and the resource conservation team. In addition, the Visitor Centre in Greenwich has been provided and used as a venue to host faculty, researchers, and students from the UPEI Canadian Centre for Climate Change and Adaptation.



Contact Information

Parks Canada

Kim Gamble • A/Resource Conservation Manager • kim.gamble@pc.gc.ca • 902-393-8098
Jennifer Stewart • External Relations Manager • jennifer.stewart@pc.gc.ca • 902-672-6423

UPEI

Aitazaz Farooque • Interim Associate Dean, School of Climate Change and Adaptation • afarooque@upei.ca • 902-566-6084
Nicole Phillips • Director of Communications and University Relations • nphillips@upei.ca • 902-388-1832

2. Faculty of Sustainable Design Engineering

Design clinics for innovative solutions



Since September 2015, Parks Canada has been a community partner of the Faculty of Sustainable Design Engineering (FSDE). As first-year design clinic partner, Parks Canada has the opportunity to both sensitize students to Parks Canada's work and mandate and tap the creative ideas and energy of first-year design students who bring their knowledge and talents to the table in developing design solutions.

As part of this collaboration, Parks Canada pitches projects, provides guidance to students throughout the term, provides feedback on students' proposed solutions, and contributes to ongoing discussions to identify potential future projects. Students develop design solutions to help address real-world operational challenges and to generate creative ideas for new opportunities Parks Canada is seeking to explore.



The January to May period of 2024 was exceptional as Parks Canada was involved as an industry partner for student projects across three different program years:

Year 3 (September 2023-May 2024) students designed a campsite energy use monitor;

Year 2 (September 2023-May 2024) students designed an improved campsite and parking marker; and

Year 1 (January-May 2024) students completed an array of design projects (i.e., an implement to assist with the management of invasive plant species in the park, a device to assist staff in the removal of T-bar throughout the park, an EV charging trailer for greening field-unit grounds maintenance equipment, and a device/method for tying off bulk bags of salt used during the winter).



2. Faculty of Sustainable Design Engineering

Design clinics for innovative solutions



Parks Canada participated in the spring 2024 Student Design Expo and - once again - staff were impressed with the energy, professionalism, and creativity demonstrated by participating students. The special Parks Canada Innovation and Sustainability Awards were presented during the event.

In spring 2024, FSDE team members joined Parks Canada staff for a project identification tour in PEI National Park. A new list of potential projects was generated and will be pitched to Year 1 students in January 2025.

The final student design projects from 2024 were collectively among the best and most implementable that Parks Canada has seen over the last nine years of involvement with FSDE. Given the merits of the designed solutions, additional steps were taken to secure prototypes from all program years for deployment and pilot testing in the Parks Canada-PEI Field Unit.



Contact Information

Parks Canada

Jason Lindsay • Asset Manager • jason.lindsay@pc.gc.ca • 902-626-9083

Stacey Evans • Partnering, Engagement and Communications Officer • stacey.evans@pc.gc.ca • 902-672-6422

UPEI

Wayne Simmons • Business Development Engineer • wasimmons@upei.ca • 902-388-6279

Nicole Phillips • Director of Communications and University Relations • nphillips@upei.ca • 902-388-1832

3. Faculty of Science – Biology



Gulf of Saint Lawrence Aster

The Gulf of St. Lawrence Aster (*Symphyotrichum laurentianum*) (GSLA) is endemic to Canada and only found in appropriate habitats in Quebec's Magdalen Islands, eastern New Brunswick, and on the north shore of Prince Edward Island. GSLA is listed as "Endangered" under the federal Species at Risk Act. GSLA is identified in the Multi-Species Action Plan (MSAP) for PEI National Park and National Historic Sites Administered by Parks Canada on PEI, as almost all its PEI population is found within PEI National Park.

To assist with the recovery of this plant species, resource conservation staff conduct an annual census to monitor GSLA abundance, area occupancy, and habitat conditions. In addition to monitoring, staff assist with seeding suitable habitat annually in the Spring.

UPEI maintains the only seed bank for GSLA originating from PEI National Park and is instrumental in ensuring the long-term success of this species in the park. The UPEI seed bank has the capability of germinating plants for subsequent transplantation and direct seeding of inflorescences to suitable habitat within PEI National Park. It provides a great opportunity to see science in action

and to fill knowledge gaps that will be of benefit to the recovery of this species.

This project has seen great success and helps Parks Canada uphold its mandate by maintaining the ecological integrity of the park and contributing to the recovery of a species at risk. This work helps Parks Canada meet objectives outlined in the MSAP. Parks Canada provides updates annually to Dr. Lacroix in the Biology Department regarding transplant success and population estimates. In past years, Parks Canada has supported undergraduate and graduate students from UPEI working on GSLA research and will continue to support future GSLA research initiatives.

Coastal Invertebrate Monitoring

Parks Canada-PEI has supported ongoing research monitoring beach amphipod populations in PEI National Park for marine biology MSc work. Research on this project continued in 2024 to monitor the impacts to amphipods following Hurricane Fiona.



Contact Information

Parks Canada

Kerry-Lynn Atkinson • Ecologist Team Leader • kerry-lynn.atkinson@pc.gc.ca • 902-626-8692
Jennifer Stewart • External Relations Manager • jennifer.stewart@pc.gc.ca • 902-672-6423

UPEI

Christian Lacroix • Professor, Department of Biology • lacroix@upei.ca • 902-620-5231
Nicole Phillips • Director of Communications and University Relations • nphillips@upei.ca • 902-388-1832

4. Faculty of Veterinary Medicine—Atlantic Veterinary College (AVC)

Bat Monitoring and Education in PEI National Park

Since 2015, the Canadian Wildlife Health Cooperative (CWHC) based at the Atlantic Veterinary College (AVC) has worked with Parks Canada in support of bat monitoring initiatives in PEI National Park. This group has supported building in-house capacity for analyzing bat monitoring data collected by Parks Canada throughout the summer. The bat monitoring program helps Parks Canada meet objectives outlined in PEI National Park's Multi-Species Action Plan for species at risk. Parks Canada staff gain scientific expertise on bat species at risk and on White-nose Syndrome.

In 2024 Parks Canada and CWHC continued to collaborate on acoustic monitoring (*See below*) and emergence counts. One emergence count was conducted this summer in collaboration with CWHC and park staff to monitor bat boxes located in the park as well as roosts in a private dwelling bordering Parks Canada-administered land.

Through Parks Canada support, the Atlantic CWHC Centre is able to conduct wildlife health surveillance of the bats in PEI National Park and share expertise related to many other wildlife species e.g., Bald Eagles, marine mammals.

Together, CWHC and Parks Canada also collaborate on outreach initiatives that educate the public about the valuable role bats play in a healthy ecosystem, the health of Island bat species, and about the significant amount of research being done to help PEI's endangered bat species. These initiatives take place throughout the year and especially during Bat Week, which occurs annually from October 24 to 31.

Parks Canada Veterinarian

Parks Canada's Wildlife Health team provides support to resource conservation and field unit staff across the country on all veterinary-related matters. Dr. David McRuer is a member of this team and an adjunct professor with the Department of Pathology and Microbiology located at the Atlantic Veterinary College (AVC). Dr. McRuer collaborates on an ongoing basis with the AVC, Canadian Wildlife Health Cooperative, the Province of PEI and Parks Canada on relevant wildlife health issues across PEI.

This Fall, a teaching scenario led by Dr. McRuer took place in PEI National Park as part of the AVC's Ecosystem Health course. Parks Canada provided access to sites for the scenario as well as local expertise to guide and facilitate the scenario which focused on response to cyanobacteria and botulism exposure in the environment.





Dr. Tim Ogilvy AVC Vet Camps

Parks Canada supports UPEI's summer programming for youth at the Atlantic Veterinary College (AVC). This collaboration often includes presentations to students about Parks Canada in PEI, providing an opportunity to share the Agency's mandate and priorities with the next generation of stewards for these protected places.

Throughout the summer of 2024, Parks Canada's Public Outreach Education team visited the Dr. Tim Ogilvy AVC Vet Camps and discussed some of the species at risk in PEI National Park, including PEI's endangered bat species. These presentations also included updates on the collaborative bat research being undertaken by UPEI and Parks Canada, and what people can do to help. Campers and UPEI student camp leaders were enthusiastic; they considered steps they could take to help protect the Earth and made their commitment in writing through their own unique 'Park Promise'.

Marine Animal Response

Parks Canada-PEI continues to engage with the Marine Animal Response Society (MARS) and AVC to report and respond to strandings of marine animals, including marine species at risk, found within the terrestrial environment of the park. In 2024, park staff assisted AVC staff and students to conduct necropsies on a beached Beluga Whale, Minke Whale, and Leatherback Sea Turtle. *(See above and below)*



Contact Information

Parks Canada

Jennifer Stewart • External Relations Manager • jennifer.stewart@pc.gc.ca • 902-672-6423
Kim Gamble • A/Resource Conservation Manager • kim.gamble@pc.gc.ca • 902-393-8098

UPEI

Michelle Hooper • External Engagement Assistant • michellehooper@upei.ca • 902-566-0589
Apyrl Munro • External Engagement Officer, Dean's Office, AVC • apmunro@upei.ca • 902-566-6786

5. Faculty of Science—Environmental Studies



Student Internships

As part of the requirements for completing the Bachelor of Environmental Studies program, students are required to complete a work term with a community partner in the environmental field. In fall 2024, Parks Canada-PEI hosted one intern student from this program. The student successfully completed 30 hours during the semester assisting with many different field and research projects in PEI National Park including: forest restoration work; soil decomposition monitoring; key tree index; invasive species management; and coastal restoration work.

Forest Ecosystems in PEI National Park

During Fall 2024, students from UPEI's Environmental Studies program visited PEI National Park and learned of the importance of PEI's coastal Krummholz forests and their critical role in protecting PEI from the impacts of climate change. Students from the UPEI student 'Climate Action Association' assisted with krummholz tree planting efforts in the Cavendish Campground.



Contact Information

Parks Canada

Kerry-Lynn Atkinson • Ecologist Team Leader • kerry-lynn.atkinson@pc.gc.ca • 902-626-8692
Jennifer Stewart • External Relations Manager • jennifer.stewart@pc.gc.ca • 902-672-6423

UPEI

Carolyn Peach Brown • Environmental Studies • hcpbrown@upei.ca • 902-620-5066
Nicole Phillips • Director of Communications and University Relations • nphillips@upei.ca • 902-388-1832

6. Other Engagement and Learning

UPEI Destination Nature Summer Camp

Again in 2024, Parks Canada's Public Outreach Education team participated in UPEI's Destination Nature summer camp, highlighting Parks Canada's "Park Promise". Students learned about species at risk, coastal ecology, and were encouraged to make their own individual promises to help protect the park and, by extension, the Earth. Students also learned about Parks Canada's approach to protecting Canada's natural and cultural resources. The response from campers and UPEI student camp leaders was enthusiastic, and they discussed ways they could help protect the Earth in the future.

L.M. Montgomery Institute

This past year was an exciting one as we marked the occasion of L.M. Montgomery's 150th birthday. Celebrations were varied and held throughout the year across PEI. The L.M. Montgomery Institute continues to be a valued resource in support of Parks Canada-PEI initiatives developed for Green Gables Heritage Place, especially those focused on L.M. Montgomery. Meetings tend to take place on an "as needed" basis, as the requirements vary according to the projects undertaken by both parties. The Institute was a key contributor during the

consultation phase of the creation of the new management plan for Green Gables (released in January 2024) and Parks Canada was pleased to be able to take part in sessions and events held during the Institute's June 2024 conference.

STEAM PEI Marine Explorers Summer Camp

Parks Canada's Public Outreach Education team was pleased to participate in STEAM PEI's 2024 Marine Explorers Summer Camp held at the Canadian Centre for Climate Change and Adaptation in St. Peters. Participants learned about some of the coastal ecology work being undertaken in PEI National Park and were introduced to some coastal species at risk. Campers participated in the Parks Canada's Park Promise program, whereby everyone considered steps they - and their family members - could take to help protect the park and tread lightly in the natural world.



Contact Information

Parks Canada

Jennifer Stewart • External Relations Manager • jennifer.stewart@pc.gc.ca • 902-672-6423

Janette Gallant • National Historic Sites Visitor Experience Manager • janette.gallant@pc.gc.ca • 902-394-7254

UPEI

Jonathan Lane • Coordinator, Sales and Panther Academy • jalane@upei.ca • 902-566-0636

Philip Smith • Chair, LMMI • smithp@upei.ca • 902-566-0549

Kate Scarth • LMMI • kscarth@upei.ca • 902-628-4376

Nicole Phillips • Director of Communications and University Relations • nphillips@upei.ca • 902-388-1832

7. Ongoing and Future Collaboration Opportunities

Program	Project Description	Status	UPEI contact	Parks Canada contact
School of Climate Change and Adaptation	Data collection and monitoring activities Links with Bachelor of Science in Applied Climate Change and Adaptation internships	Ongoing	Aitazaz Farooque Nicole Phillips	Kim Gamble Jen Stewart
Faculty of Sustainable Design Engineering	Design clinics for innovative solutions	Ongoing	Wayne Simmons Nicole Phillips	Jason Lindsey Stacey Evans
Faculty of Science—Biology	Greenhouse-grown Gulf of St. Lawrence Aster Self-directed studies	Ongoing	Christian Lacroix Nicole Phillips	Kim Gamble Jennifer Stewart
Faculty of Science—Environmental Studies	Student project teams conducting ecological studies	Ongoing	Carolyn Peach Brown Nicole Phillips	Kim Gamble
Faculty of Veterinary Medicine—Atlantic Veterinary College	Bat Monitoring and Education Parks Canada Veterinarian Dr. Tim Ogilvy AVC Vet Camps	Ongoing	Megan Jones Apryl Munro	Kim Gamble Jennifer Stewart
UPEI Summer Camp: Destination Nature	Engagement with youth	Ongoing	Jonathan Lane	Jennifer Stewart
STEAM PEI Marine Explorers Summer Camp	Engagement with youth	Ongoing	Jonathan Lane	Jennifer Stewart
Environmental Communication & Environmental Communication Strategies	In-class presentations	Ongoing	Barb MacDonald Emma LaDouceur	Jennifer Stewart
Applied Communication, Leadership, and Culture	Student internships and collaboration opportunities	TBD	David Hickey	Jennifer Stewart
PEI Cleantech Academy	UPEI-HC collaboration on net zero leadership	TBD	Susie Zavala Sandra Moore Allison Doughart	Kim Gamble Jennifer Stewart
Master of Island Studies	Student internships and collaboration opportunities	TBD	Laurie Brinklow	Jessica Foster Jennifer Stewart Janette Gallant
Archaeology	Possibility of engaging anthropology students in archaeological dig at Greenwich	TBD	TBD	Kim Gamble Jessica Foster