

AGRICOLA

FOR ALUMNI AND FRIENDS OF DALHOUSIE'S FACULTY OF AGRICULTURE

SUMMER 2023

**Cultivating
a sustainable
future**



Join us for Homecoming 2023!

October 12-14
Dalhousie Agricultural Campus

Events include:

- Blue & Gold Awards Banquet
- College Royal
- Dean's Breakfast
- Atlantic Agricultural Hall of Fame Induction Ceremony
- and more!

For an updated listing of upcoming events, visit dal.ca/agalumni



AGRICOLA

FOR ALUMNI AND FRIENDS OF DALHOUSIE'S FACULTY OF AGRICULTURE

SUMMER 2023

Cultivating a sustainable future

COVER PHOTO: Fourth-year agricultural business student and *Sustain* by Cultiv8 student team lead Luci Ellis checks on chard in the vegetable garden in preparation for harvesting community-supported agriculture (CSA) subscription boxes. Read more on page 5. **BELOW:** The Rock Garden at the Dalhousie Agricultural Campus was recently recognized with the Frank Cabot Public Garden Award by the North American Rock Garden Society.



AGRICOLA

VOLUME 53, NO.1, 2023



**DALHOUSIE
UNIVERSITY**

**FACULTY OF
AGRICULTURE**

Cover photo:

Nick Pearce, Dalhousie University

Published twice yearly by Dalhousie's
Faculty of Agriculture

EDITOR

Colette Wyllie

CONTRIBUTING WRITERS

Stephanie Rogers

PHOTOGRAPHY

Nick Pearce

ART DIRECTION / PUBLICATION DESIGN

Katie Goodz

RETURN UNDELIVERABLE ITEMS TO:

Dalhousie University
Faculty of Agriculture
PO Box 550
Truro Nova Scotia B2N 5E3

PHONE: 902.893.6022
EMAIL: agalumni@dal.ca

For advertising opportunities contact editor.

Mailed under Canada Post Publications
Mail Sales Agreement No. 40063668





COVER STORY

4 Cultivating a sustainable future

What started out as a space for students to test entrepreneurial ideas has blossomed into a full-fledged student-run vegetable and cut flower production farm at the Agricultural Campus. Get to know Cultiv8 in 2023.

RESEARCH

26 Working with nature for a sustainable future

Dr. Andrew Hammermeister leads the Organic Agriculture Centre of Canada, located at the Dalhousie Agricultural Campus.

27 A renaissance in soil mapping

Dr. Brandon Heung's work falls under the umbrella of digital soil mapping and understanding how soils change over space and time.



Message from the editor	2
Dean's message	3
Donor spotlight	20
In memory	22
Alumni Association	24
Look who's talking	36

EVENTS

Blue & Gold Awards 2022	28
Reunions	29
Barley Party 2023	31
Convocation 2023	33

AROUND & ABOUT

Taya Kehler (Class of '19)	12
David Cooper (Class of '01 and '03) – Arbor Plant Health Care	14
Emily Johnstone (Class of '16 and '23)	16
Steve Ells (Class of '88)	18



Colette Wyllie

Editor, *AGRICOLA*

Alumni Engagement Manager (Acting), Faculty of Agriculture

Greetings, Aggies!

This is the first time I've written a letter from the editor since 2016. Your regular editor Alisha Johnson is on a temporary secondment in another role, and I find myself filling in for her for the second time (the first being her maternity leave in 2015-16). As a proud Aggie and avid reader of the *AGRICOLA* myself, I know I have big shoes to fill until her return.

Luckily for me, working at the Agricultural Campus means being constantly surrounded by inspirational people, whether they be alumni, students or staff. Finding content for the *AGRICOLA* is never a problem – so many Aggies are doing incredible things in the world of agriculture and beyond.

You may notice a plant theme throughout this issue – this is not a coincidence. The world of plants is a large one, as demonstrated by the variety of plant-related careers our alumni have pursued, highlighted in the Around & About section of this issue. From agronomy to landscape architecture, from arboriculture to viticulture to production horticulture – the possibilities are endless. As you know, studying at the Faculty of Agriculture provides the hands-on opportunities necessary to set students up for success in their careers, and this is especially evident in plant-related programs. A recent opportunity added to campus is *Sustain by Cultiv8*, a student-run vegetable and cut-flower production farm, highlighted in the cover story of this issue. Find out more on page 5.

We've had a successful lineup of events since the last issue, including Dean's Receptions, Community Dinners, Homecoming and class reunions. We were pleased to see many familiar and new faces at Dean's Receptions in Nova Scotia, PEI, Newfoundland and Ontario, and thrilled to host class reunions on campus during Homecoming 2022. Homecoming is a perfect time for reunions – there are numerous campus events to take in and it's a beautiful time of year. If you're curious about planning a reunion, please don't hesitate to get in touch!

Also as part of Homecoming 2022, we honoured three very deserving alumni at our annual Blue & Gold awards gala. Charlie Keddy, Valerie Carmichael and Ryan Barrett are three truly inspirational Aggies with incredible stories to tell. You can read more about their accomplishments on page 28.

Keep an eye on our website, dal.ca/agalumni, for an updated listing of alumni events, and look for us at industry-related events near you.

I hope you enjoy this edition – as always, if you have any comments, please send them along. We love to hear from you!

Colette Wyllie

Colette Wyllie | colette.wyllie@dal.ca | 902.893.6022



Dr. David Gray

Dean, Faculty of Agriculture
Principal, Dalhousie Agricultural Campus

I've always said our campus is our largest classroom and while most of our full-time students are gone for the summer, our campus kicks into high gear.

Our beautiful Bicentennial Botanical Garden encompasses 26 acres and contains several horticultural features including a pollinator garden, stone stacked wall, Alumni Gardens, herb garden, heath and heather garden, a substantial rhododendron display and a spectacular rock garden.

Our Rock Garden is one of the two largest rock gardens in Atlantic Canada and is one of the most significant horticultural features in Eastern Canada.

The North American Rock Garden Society hosted its annual conference on our campus this past summer and we were pleased and honoured to be the recipient of the prestigious Frank Cabot Public Garden Award. It speaks to the talents and vision of our faculty and staff while making a significant contribution to our campus community and community at large.

Our campus was also host to the Canadian Society of Soil Science annual conference and with the newly established Centre for Sustainable Soil Management on campus our faculty are making significant impacts in soil mapping and sustainable agricultural strategies. Learn more about the research of Drs. Brandon Heung and Andrew Hammermeister in this issue of our magazine.

We were thrilled to welcome our community back to campus in July for our 50th annual Community Day – the first in three years due to Covid. Close to 1500 participants walked our grounds and explored all we have to offer.

Sustain by Cultiv8, our student-run vegetable and cut-flower production farm is also active throughout the spring, summer and fall with weekly farmstand sales, subscription farm boxes and student employment. Learn more about what they offer in our cover article this issue.

An outdoor classroom and landscape manager was hired to supervise the botanical garden and horticultural staff while overseeing the maintenance of outdoor classroom spaces, including orchard, gardens, greenhouses, and living/green walls, and managing those who are responsible for coordinating research space in the Demonstration Garden and Plumdale Research Facility. Alum Chelsea Baird is highlighted in our Look Who's Talking section of this issue.

We are a proud member of the Truro/Bible Hill community, and we welcome our neighbours to explore our campus and our programs through our department of Extended Learning.

As always, our campus gardens are open to the public at any time. Learn more about the Bicentennial Botanical Garden at dal.ca/gardens.

Dean David Gray | @limpetman



“Students on this campus are naturally innovative, which of course is not a shock. Agriculture and innovation go hand in hand.”





Cultivating a sustainable future

What started out as a space for students to test entrepreneurial ideas has blossomed into a full-fledged student-run vegetable and cut flower production farm at the Agricultural Campus. Cultiv8 allows students to explore their interests and their potential while supporting food security, sustainability and the local economy.

Cultiv8, Dalhousie Agricultural Campus' sandbox, was launched in 2014 along with five other university sandboxes following the release of the One Nova Scotia Report. This report underscored the importance of entrepreneurship and changing the way Nova Scotia does business to create real change in the province. Each sandbox was established to help students develop entrepreneurial mindsets and to build a culture of innovation, contributing to the ultimate goal of growing the sustainability of small and medium-sized businesses in Nova Scotia.

Cultiv8's model has evolved since 2014, but at least one thing remains the same: Faculty of Agriculture students get the chance to test the viability of ideas, products and businesses in a safe space with support from staff, industry and community.

"Students on this campus are naturally innovative, which of course is not a shock. Agriculture and innovation go hand in hand," says Jason Grant, manager of Cultiv8. "Cultiv8 allows students to take their ideas and theory and apply them to practice in a risk-free space."

Jason's support and expertise is invaluable to Cultiv8. A plant science (2011) and Master of Science (2013) graduate of the Faculty of Agriculture, he also has direct experience in ideation, creation and implementation in the value-added agri-food industry, having launched a line of gourmet habanero-based jellies called PepperHead in 2013. He knows the ropes well.



Cultiv8 manager Jason Grant (Class of '11 and '13).

And his entrepreneurial spirit and determination shine through in the growth and success of Cultiv8. Taking on the role of manager in 2017, Jason has worked tirelessly since that time to expand Cultiv8's programming and make it as applicable as possible to the real world.

"One of our overarching goals is to model solutions in food security and sustainability not only for our students, but eventually for local farmers as well," he says. "We need to not only provide theory but provide an area for students to work on that theory. It's crucial that we practice what we preach."

Of the suite of offerings rolled out over the last few years, the largest and most impactful is undoubtedly the *Sustain* by Cultiv8 initiative.

Sustain by Cultiv8

"Under the essential service of agriculture, with a focus on food security and climate emergency reversal, we are building an inclusive, student-run economically sustainable vegetable and cut flower production market garden," says Jason. "But the vision is more than that. *Sustain* is positioned to become a hub of students, teachers, research, industry and community."

Sustain is an ambitious project, seeking to meet a large number of outcomes – but Cultiv8 is making good on them.

Not only does *Sustain* provide the opportunity for students to develop skills in sustainable vegetable production through hands-on experience, it also actually employs students. This summer there are five *Sustain* student employees, three of whom are interns, who, through this experience, also receive credit for the AGRI 2001 Internship course – the main objective of which is to help facilitate the development of the skills, knowledge, and experiences necessary to be successful in a workplace related to the student's area of study.

"We want to provide paid opportunities for students to explore," says Jason. "They should feel empowered to work on their own projects individually as well as collectively as a team. Opportunities exist to enable students to intern, apprentice, conduct honours and grad projects, build involvement with community and explore value-added ag entrepreneurship."

Luci Ellis, an agricultural business student, was employed as a Cultiv8 student intern in 2022. She has returned this season as the student team lead. "I had so much fun last year," she recalls. "It was the best job I've ever had. The option to come back again

this year and focus on developing managerial and leadership skills was an opportunity I couldn't pass up."

Amanda Whitford is heading into her second year of the plant science diploma and is working for Cultiv8 for the first time this summer. "Growing is a passion of mine, and working for Cultiv8 has been a great opportunity to expand my skills. I get to take things that I've learned in class and apply them on a scale I wouldn't otherwise be able to."

The unique interests of each of the interns employed this summer lend themselves well to this approach – one student has a specific interest in floriculture, one an interest in building awareness around community supported agriculture (CSA), and one an interest in social media and building an e-commerce platform. Together, they are advancing the awareness, efficiency and production of *Sustain*, which has already grown significantly since launching in 2020.

"Unfortunately, the pandemic hit during our first year of production," recalls Jason. "But we had already started the work, so the silver lining was that we could donate all the vegetables grown that year."

The first sales came the following year. In 2021, operating out of the demonstration garden on Pictou Road, *Sustain* sold farm gate vegetables to the public, wholesale vegetables to Chartwells, the campus food services provider, and was also able to provide donations to the Colchester Community Food Bank.

In 2022, *Sustain* added an additional sales option – a CSA subscription box. A total of 40 subscriptions were sold in 2022, with an additional 11 subscriptions donated to families in need via a partnership with United Way. The *Sustain* farm stand also installed a sales kiosk to streamline sales and provide further retail experience to students.

In 2023, garden sales and subscription boxes continue, along with donations to the food bank, United Way, and the Dal AC

food pantry. To help with project continuity, recent agricultural business graduate John Raymond (Class of '23) has been hired as farm coordinator for the next three years while he pursues his Master of Science. A Cultiv8 student employee of several years, John's research will contribute directly to *Sustain* as he examines entrepreneurship education ecosystems at agricultural campuses under the supervision of Tasha Richard of the Department of Business & Social Sciences.

"I'm going to be looking at the support systems for entrepreneurship specifically at university agricultural campuses," says John. "My experience with *Sustain* and Cultiv8 made this an appealing project for me."

Cultiv8 and *Sustain* have become embedded in the curriculum of many undergrad courses on campus as well, including Business Planning (MGTA 2013), Agricultural Ecosystems (AGRI 1000), Introduction to Plant Science (PLSC 1001), Advertising and Promotion (MGTA 2006), Specialty Crops (PLSC 2000), and Vegetable Production (HORT 2000).

Jason expects there will be more grad students contributing to *Sustain* through their research in the coming years – just one of the many outcomes Cultiv8 is working toward.

And it doesn't end there.

Climate battery greenhouse

"We are actively working toward installing a 96' x 30' climate battery greenhouse, which will enable us to sustainably grow food year-round," says Jason. "It will also allow our campus to do all sorts of amazing research in a climate-friendly environment."

A climate battery greenhouse captures the heat of the sun and stores it underneath the greenhouse as a thermal mass, or battery. That heat can then be utilized as the outdoor growing season tapers off into sub-zero temperatures. According to Jason, there are existing successful climate battery greenhouses in the province,



Farm coordinator John Raymond (Class of '23).



Student team lead Luci Ellis.

2023 Cultiv8 team members, clockwise from top left: manager Jason Grant, student team lead Luci Ellis, student intern Cullen MacDonald, student intern Amanda Whitford, farm coordinator John Raymond.





but they are not currently being used for research purposes. He is excited about the opportunities having a climate battery greenhouse will provide to students, instructors and researchers alike.

“The state of the climate emergency is such that we have to be very mindful and intentional about the decisions we make for our future of agriculture,” says Jason. “This greenhouse is another opportunity for us to model sustainable solutions for future and existing farmers.”

Cultiv8 CHEF

Sustain may be the most intensive and well-recognized Cultiv8 initiative, but it's certainly not the only one. Winter 2023 saw the launch of a pilot program called Cultiv8 CHEF, which was designed to allow students to learn valuable kitchen skills, food preservation basics and to have fun developing their own value-added food product.

Teaming up with Chef Reinier Boermans, a certified, European-trained chef with 20 years of experience, Jason intended the program to provide another avenue for students to learn about food security and product development.

“Successful food preservation contributes to food security. We wanted to bring back the ability to preserve products as essential skills in food security, and then we wanted to think a little beyond that into the value-added food product development area – a space which is exciting for entrepreneurs, foodies and consumers”, he says.

The pilot was a near sell-out with 12 participants. Students were introduced to kitchen basics, spent time following recipes to create products, and then teamed up to build their own recipes and products, seeking feedback and making improvements along the way.

Plant science student and Cultiv8 intern Cullen MacDonald participated in the pilot program. “I’m interested in food chemistry and figured we would get a chance to dig into that, but we learned so much more than I expected,” Cullen says. “We spent time looking at all the steps involved in taking an idea through to a final, finished product.”

Four student teams developed customized chutney recipes, and at the end of the eight-week program were tasked with presenting their recipe to a panel of judges, which Cullen says was lots of fun and quite interesting as well.

“It was fascinating to see the end results. Each team had the same information and received the same tasks, but came up with four very different products.”

One of the four chutney recipes will be used as part of the menu for the scholarship banquet coming up in November 2023.

Additional programming

Cultiv8 also provides opportunities for Faculty of Agriculture students to work with and learn from like-minded students from other universities. One such opportunity is another pilot program called Nova Nourishment.



With funding from the Department of Advanced Education, Cultiv8, along with the sandboxes at Saint Mary's University, Acadia University, Cape Breton University and NSCC Digby will each hire four students per semester of the 2023-24 academic year to work toward understanding what the state of food sovereignty and security is on their respective campuses.

Each sandbox will work independently for the majority of the project, but students from all participating schools will get together for a few weekend events to collaborate and learn about what's happening with each team. The students will be challenged to develop a prototype for their school that will improve food security on campus. If the program works well, it has potential to be rolled out at all sandboxes in the province.

And of course, Faculty of Agriculture students also have the opportunity to connect with students from other Dalhousie sandboxes. Known collectively as the DalBoxes, Cultiv8, IDEA (Faculty of Engineering), Surge (Faculty of Science), PULSE (Faculty of Health) and ShiftKey Labs (Faculty of Computer Science) provide collaborative opportunities throughout the school year.

Programming support

Financial support for Cultiv8's programming has been enthusiastic – which is crucial, since all this essential work comes at a cost. Funded largely by the Department of Advanced Education, support from interested donors and revenue from garden sales has allowed Cultiv8 to grow, and partnerships with financial institutions have contributed to program longevity.

Donor support has been particularly strong for *Sustain*. It's clear that alumni, staff, faculty, industry and community members see the value in this student-run initiative. Particularly after the pandemic, hands-on learning opportunities that bring together students, teachers, researchers, industry and community are more important than ever.

And of course, *Sustain* would not be possible without internal support from the Department of Plant, Food and Environmental Sciences, which provides both garden and greenhouse space, and particularly the expertise and guidance of agricultural technician Mike Main, who oversees the demonstration garden.

The community of Cultiv8

Jason's vision for Cultiv8 to become a hub for community is already being realized through every collaboration, competition, donation, garden sale, and student interaction. The positive outcomes of Cultiv8's programming are many, and not just for the students. Anyone who gets involved in Cultiv8 in even the smallest way is bound to benefit – both in the short and long term.

"These students are our future leaders," says Jason. "We owe them the opportunity to develop knowledge, skills and passions that motivate them so that they become advocates for a sustainable future."

With the support of the Cultiv8 community, their futures are looking bright.





Taya Kehler

When Taya Kehler (Class of '19) was making plans for her future, she knew she wanted to work with plants, but she wasn't ready to abandon her penchant for art and design. Equally passionate about the outdoors and visual arts, Taya sought something that would tick all her boxes. She found it in the field of landscape architecture.

"I've always loved the outdoors, and knew I wanted to work with plants, but I wasn't sure what that would look like as a career," says Taya. "At the same time, I'm a creative person, with many artistic hobbies. Landscape architecture is a field that blurs the lines between science and art, community development and environmental studies. All of my interests in one degree made it an easy decision for me."

Born in Carman, Manitoba, it might come as a surprise that Taya would travel all the way to Nova Scotia to pursue her degree. For her, it was an obvious choice.

"I chose Dalhousie because I wanted to be on the east coast and explore a new place," she says. "The small class sizes appealed to me, and I got the impression that the beautiful gardens and greenhouses on the campus supported the landscape architecture program well."

Her impression was correct. According to Taya, the hands-on learning in the landscape architecture program allowed her and her classmates to design and create actual new spaces on campus together – including a new pond near the Collins Horticulture Building, which she and members of her team built in their project management course.

"We learned so much by doing, and ventured outside of the classroom in many of our courses," she recalls. "And we didn't only use the landscape spaces on campus for our studies, but traveled to other sites around Nova Scotia for our studio courses in our final year."

She credits the small class sizes and the creativity of instructors including Ed Versteeg and Tracey MacKenzie for making this possible. One of her favourite classes was Arboriculture, in which she learned to climb trees safely.

Taya has put her studies to good use. These days, she is the gardens coordinator at The Riverwood Conservancy, a charity in Mississauga, Ontario. The Riverwood Conservancy is a 150-acre nature preserve and public park in the middle of the city, offering nature and garden-based programs and stewarding the land. As gardens coordinator, she is responsible for managing many diverse public gardens, leading garden programs, and supporting conservation work.

"My goal when I graduated was to design gardens in public parks, and that's exactly what I get to do and more," says Taya. "I design and maintain gardens, educate the public, and build community through my work, and it feels great to be making a difference."

Her job is certainly never boring. On any given day, she could be designing a garden, pulling weeds, leading a birding tour or doing restoration work in the forest. With the help of about 40 dedicated volunteers, Taya has designed and implemented a large native pollinator garden and a climate-resilience garden, as well as expanded the vegetable garden and rhododendron beds. All the gardens are used for teaching about climate change, pollinators, food security and more in many of the educational programs and serve as a peaceful space for the public to enjoy.

One aspect of her job that she finds particularly rewarding is the opportunity to support conservation work.

"I love knowing that we are making real impact in the park's ecology," she says. We remove invasive species and plant native species, protect sensitive areas, and maintain trail systems to allow the public to experience nature in the city. I've really enjoyed being able to apply my education in landscape architecture to this area – creating trail strategies and mapping use of the site to ensure the natural spaces are preserved for the future."

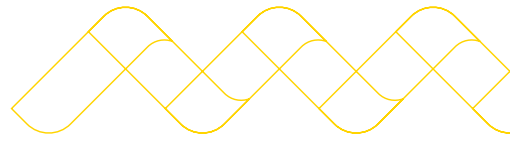
Taya is clearly busy with her day job, but staying connected to her artistic side is equally important to her. A talented paper cutting artist, she has exhibited her art in the past, including during her time as a student at the Agricultural Campus. Although she is currently taking a break from creating, she keeps in touch with the art world by serving as secretary on the board of directors for Visual Arts Mississauga, another charity housed within Riverwood Park.

And of course, she gets to channel her inner artist often while working in the Riverwood gardens.

"I feel lucky to have found a job so well-suited for me," she says. "That's the beauty of Landscape Architecture! It can lead in many directions and support a variety of careers."

"Who knew I'd be protecting turtle eggs in a wetland and growing vegetables for my local food bank as a career? It doesn't get much better than that!"





Dave Cooper

Arbor Plant Health Care

David Cooper (Class of '01 and '03) grew up in rural Newfoundland in the small town of Point Leamington with a population of 800 people.

He, along with his dad and grandfather, had a small family-owned sawmill and worked in the woods.

“I was involved until I graduated from high school and realized there was not much of a future in the sawmill or forestry but I always loved the woods and working with trees,” he explained.

With a friend attending the AC, Dave looked closer into the programs. The landscape horticulture program appealed to him as it seemed to have a little bit of everything – including arboriculture.

“It would be an outside job and physical work and I enjoy both,” he added.

Dave began the two-year program and graduated in 2001, but was having so much fun he returned and completed the four-year program, graduating with a Bachelor of Technology in landscape horticulture in 2003.

After finishing his program, Dave worked throughout New England for a couple of different arboriculture firms to gain industry experience and insight, while making key industry connections. Following this, in 2006, Arbor Plant Health Care was born.

Strategically located in Grand Lake, within the Halifax Regional Municipality, Dave began Arbor with nothing but a three-quarter-ton truck, some chainsaws and eventually an old chipper purchased from one of the companies he had worked for in New England.

“When I started, I had no clients, so I was willing to prune trees, put in a new walkway, clean gutters, or paint houses to pay the bills,” he said. “I did what I had to do to make it work!”

Over the past 16 years, the company has grown to include numerous trucks, chippers, and other specialized equipment to

Pictured are Arbor Plant Health Care team members (wearing hard hats) with assistant professor Tracey MacKenzie and current Faculty of Agriculture students. At the rear is Dave Cooper, with Kirk Fletcher (L) and Chris Clements (R) in front.



make the job safer and more efficient. It has also grown to include several additional AC alumni – seven out of eight field staff are AC grads! Apart from Dave, the staff includes Kirk Fletcher (Class of '92), Chris Clements (Class of '96), Fraser Hart (Class of '10), Adam Banks (Class of '04), Seth MacIntosh (Class of '02 and '09), and Blair Cameron (Class of '05 and '07). Dave's wife, Carla (Shaw) Cooper (Class of '03 and '06), who he met at the AC and married in 2006, recently joined the Arbor team for admin and tech support.

"We currently focus on caring for trees and shrubs," Dave explained. "We like to preserve trees as much as possible, but tree removal is still a big part of the business. Our services include tree and shrub pruning and removal, fertilizing, stump grinding and removal, tree and shrub planting, and consulting."

Dave and his team were recently invited back to campus to chat with students about the industry, arboriculture, and specifically about the role of Arbor Plant Health Care within the industry.

Arbor also led the effort in tree pruning and removal on campus after Hurricane Fiona. Dave still has a strong connection to the AC, as he maintains a close friendship with professor and mentor, Tracey MacKenzie.

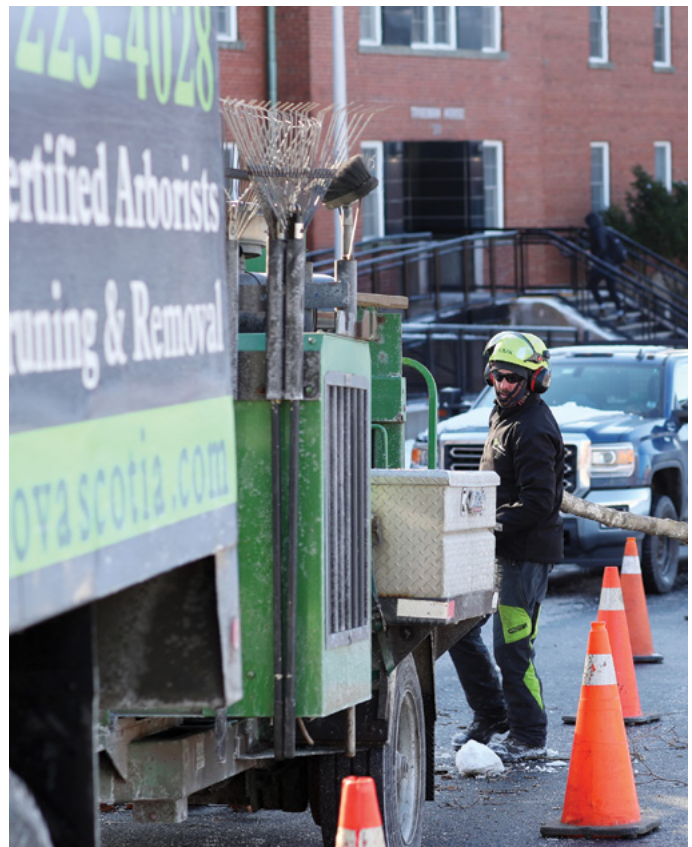
"There were several trees that were not structurally sound anymore and deemed hazardous that needed to be removed," he explained. "There were other trees we pruned to mitigate risk by taking out dead, broken and hanging branches".

Kirk Fletcher, Class of 1992, completed a two-year diploma in landscape horticulture and lived in Chapman House during his time on campus. He was part of the crew helping with the Fiona clean up on campus.

"Every time I come to campus I have a flood of memories, a lot of good memories," he explained. "I was in Chapman House for two years – rooms 104 and 301," he added.

"The environment is paramount – all aspects of it, water, air, soil, animals, habitats, plants – having that knowledge base provides tons of potential and fantastic opportunities on this campus."

To learn more about Arbor Plant Health Care, visit arbornovascotia.com.





Pictured above is a head of wheat showing symptoms of Fusarium head blight (FHB).

Emily Johnstone

A long-time fascination with plants first led Emily Johnstone (Class of '16 and '23) to the Faculty of Agriculture for an undergraduate degree in plant science.

At the time, she didn't know much about post-secondary education, agriculture, or what kind of career she wanted to pursue. Ten years, two degrees, and one pandemic later, all of that has changed.

"I had so many supportive instructors during my undergrad," says Emily. "I developed a well-rounded appreciation for agriculture, and decided I wanted to focus my career in the industry."

After graduating in 2016, Emily's search for employment in the agriculture industry took her to Alberta, where she started her journey in field crop research.

"I was a research technician at Olds College working on late-stage development of crop protectants and germplasm screening in a small plot setting," she explains.

Emily spent two years in this position and got her first real exposure to crop research. She loved it. "I learned that I really enjoyed working outside and that every day and every season brought something different. I was able to employ what I learned in school and build upon that knowledge."

After four years in the workforce, getting to know a wide variety of crops, Emily came around to the idea of pursuing a Master of Science – an idea she hadn't originally considered. In the face of a global pandemic and employment uncertainty, Emily realized two things: that she wanted to advance her education to continue working in agronomy, and that she wanted to be home in the Maritimes.

She started her graduate studies during the COVID-19 pandemic, conducting her research in Charlottetown, PE, rather than in Truro. Since inter-provincial travel wasn't an option for long stretches of time, Emily and her supervisors had to find creative solutions.

"My project was funded by Agriculture and Agri-Food Canada in partnership with the Atlantic Grains Council, and the research was to be conducted in Charlottetown under the supervision of Dr. Adam Foster," she explains. "I was hired to work on the project as a graduate student and would complete coursework and be co-supervised by Dr. Nancy McLean at the Faculty of Agriculture."

The original plan, before knowing how long travel restrictions would last, was for Emily to work on field, lab, and greenhouse components in Charlottetown from spring to fall, and complete coursework in Truro during the winter semesters. As with much of the pandemic, things didn't exactly go according to plan.

"When travel became possible and in-person learning returned in the fall of 2021, I was deep in lab work and processing field samples, and the courses I needed didn't line up with the original winter semester plan," she explains. "Luckily my instructors were very open to having me participate remotely."

By the end of her studies, Emily only ended up coming to campus three times – once to meet in person with a committee member, one day to test technology and do a practice run for her thesis defence with Dr. McLean, and finally, the following day to do her actual defence.

Emily's graduate research focused on the causal species of Fusarium head blight (FHB) of wheat and barley in the Maritimes. She sought to characterize the Fusarium population by species and mycotoxin types, and reviewed several disease forecasting models and their ability to accurately predict FHB epidemics in the region.

"Initially I didn't know if pursuing grad studies was the right choice for me," Emily says. "But I'm glad I finally did it, even though the experience wasn't a typical one. I got to continue developing my skills as a field crop researcher and develop new skills in a tissue culture and molecular biology lab to round out my resume."

Following completion of her MSc in the spring of 2023, Emily began work as a research technician with Agriculture and Agri-Food Canada in Charlottetown. In this role, she is continuing with research on FHB, also known as scab, which is a serious fungal disease in cereals. FHB can impact crop yield, grade and quality.

"It's nice to know that my grad research was important and useful, and to get to continue with this work is an added bonus," she says. "In addition to FHB research, I also get to study other cereal and oilseed pathogens of interest in the Maritimes."

Emily's commitment to field crop research is making a difference. "Emily works to find practical solutions for farmers in order to provide productive, profitable crop production while enhancing ecosystems," says her supervisor, Dr. Nancy McLean. "She has developed a keen interest in best management practices for crop production and I believe this stems from a sincere concern for and love of the environment."

Ten years, two degrees, and one pandemic later, it's clear that Emily has found her calling in agronomy – and the agriculture industry is better for it.

"I love being able to study new ideas and integrated approaches that can improve best management practices for producers, especially in the Maritimes."







Steve Ells

Steve Ells (Class of '88) spends a lot of time with grapes.

Steve was born and raised in the Annapolis Valley and returned there to work on his family's livestock and vegetable farm in Sheffield Mills, Nova Scotia, after spending time away. In 2011, Steve and his wife Karen (Class of '89) started a new venture on the Ells' eighth-generation land – a vineyard.

“After being off the farm for a number of years and gone a lot from Nova Scotia, we decided it would be nice to get back into farming,” says Steve. “Much of the landbase of the family farm had been sold to allow my father to retire, so we needed to do something smaller scale but higher value. We looked at an orchard, a market garden and a vineyard as options and decided the site lent itself very well to grape growing. There was also a need in the market for more grape production.”

Since that time, Ellslea Vineyards has grown to 55 acres and produces a mixture of hybrids and vitis vinifera for the local industry, with a focus on grapes for sparkling wines. Ellslea has grown grapes for local wineries including Benjamin Bridge in Gaspereau and Port Williams-based wineries Planters Ridge and Beausoleil Farmstead. Steve and Karen have developed strong relationships with the local industry.

It was his longstanding relationship with Benjamin Bridge, along with his expertise in grape growing, that led the award-winning winery to recruit Steve as its new head viticulturist and vineyard manager when the position became vacant earlier this year.

“Benjamin Bridge was in need of a new vineyard manager, and they are quite familiar with our vineyard and production methods,” says Steve. “Since we had significant damage to our vineyard after the polar vortex in February 2023, I was also thinking about acquiring some off-farm income. It was a win-win for both of us.”

Benjamin Bridge is well-known in Canada for its sparkling wines, including local favourite Nova 7. Nestled in the

picturesque Gaspereau Valley, the vineyard enjoys the benefits of a microclimate that provides conditions suitable for producing traditional method sparkling wines, along with aromatic whites.

The winery is also known for its innovative products – including Canada's first canned Pétillant Naturel, a raw and natural sparkling wine – and its unique hospitality, including an ice-skating surface installed on the property in the winter months. For many reasons, Benjamin Bridge is often recognized as a leader in the Nova Scotia wine industry.

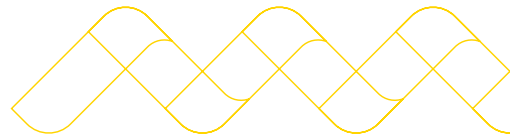
“Whether it's the wines they're making, their stewardship of the land they farm, how they work with the team they employ or the collaboration with the community and peoples around them, they put great care into their entire operation,” says Steve. “They put a lot of effort into all they do and a lot of thought into how they do it.”

Which is why their choice to recruit Steve as their head viticulturist speaks volumes about his ability and expertise. In his role, Steve is responsible for all of the activities in the vineyard, for maintaining the vineyard and ensuring all vines are healthy. It sounds like a challenge at the best of times, but particularly after the extreme cold that swept through Nova Scotia in February.

According to Steve, the extent of the damage is unknown at this point. Hybrid grape varieties are doing fairly well, and new growth at the bottom of Chardonnay, Pinot Noir and Riesling vines is promising. Some replanting will be required, but it will take the full growing season to determine which vines have failed completely.

Between rehabilitating his own vineyard and that of Benjamin Bridge, Steve has a lot on his plate. But that doesn't stop him from giving back to both his industry and his community.

Steve volunteers with the Canning Fire Department and is involved in the Kings County Federation of Agriculture. He also currently serves as president for the Nova Scotia Grape Growers Association, a not-for-profit organization representing over 100 growers in the province. About half the grapes grown for wineries in Nova Scotia are grown by independent growers like Ellslea Vineyards, and the industry continues to grow.



Hossain Farid Prize for Graduate Studies in Animal Genetics or Physiology

The Faculty of Agriculture community lost a long-time faculty member and supporter in November of 2022. Dr. Hossain Farid taught on campus from 1990 to 2017, after which he continued as an adjunct professor. Hossain was from Isfahan, Iran, and received his undergraduate degree and Master of Science from Shiraz University (1974) and his doctorate jointly from Ohio State University and University of Alberta (1986).

He and his family made Truro their home in 1990, where they became an integral part of the community. An immigrant to Canada himself in 1982, Hossain took great care over the years to help newcomers to Canada settle in. Whether it was an airport pickup, hosting people until they found a home, or simply taking them grocery shopping, Hossain was a source of reliable support for those new to Nova Scotia. He always moved those close to him, old friends or new, with his unfailing warmth, grace and decency.

Hossain was an accomplished geneticist and world-renowned researcher in Aleutian mink disease. He taught hundreds of students over three decades and he was dedicated not only to his own research but to that of his students.

To honour his memory and continue his legacy in groundbreaking research, Hossain's family has established the Hossain Farid Prize for Graduate Studies in Animal Genetics or Physiology. The inaugural award will be presented in the fall of 2024 to a deserving student. If you are a former student, colleague or friend, we encourage you to honour Hossain's legacy by making a gift to the award fund through dal.ca/giving.



Dr. Hossain Farid taught at the Faculty of Agriculture from 1990 to 2017. To honour his legacy, his family has established the Hossain Farid Prize for Graduate Studies in Animal Genetics or Physiology.

Alumni Family Bursary

Attending the AC is often a family affair. In celebration of the generations of families who have attended the Faculty of Agriculture, the Alumni Association established the Alumni Family Bursary in 2008. Faculty of Agriculture students with alumni family ties are considered for financial support as they continue in their relatives' footsteps on the Agricultural Campus. **To date, the Alumni Family Bursary has provided a total of \$168,465 to 187 students.**



Pictured are Alumni Association board members Brian Crouse and Dale McIsaac with 2022 Alumni Family Bursary recipients at the scholarship banquet in November. *First row, L to R:* Emma Bishop, Carmen Oulton, Jill Lockerby, Simon Allen, Brianna Hiltz, Payton Schenkels. *Second row L to R:* Brian Crouse, Gabrielle Schenkels, Leah Newcombe, Alex Van De Sande, Charlea Lowe, Hans Schenkels, Christopher Llewellyn, Dale McIsaac. *Not pictured:* Sinead Riordon, Luke Bishop, Hayley Cox, Abby Fisher.



Dr. Claude Caldwell Agriculture Awards

Dr. Claude Caldwell is a well-known face at the Faculty of Agriculture. Over the course of three decades he served not only as professor and researcher, but also as Plant & Animal Sciences Department Head, both men's and women's varsity soccer coach and finally Associate Dean, Academic. Even now, in his retirement, as Professor Emeritus, he remains involved in research in the Department of Plant, Food & Environmental Sciences.

However, Claude's greatest legacy is arguably his international work. He has more than 15 years of extensive international experience, including the provision of technical and facilitation services in training, extension and curriculum development under various projects in Cambodia, China, The Gambia, Vietnam, The Philippines, Jamaica, Trinidad and Tobago, Indonesia, Tanzania, Uganda and Ethiopia.

For 20 years, he has been a champion of the very successful 2+2 articulation agreement between the Faculty of Agriculture and the Fujian Agriculture and Forestry University in Fuzhou, China. As NSAC's first international articulation agreement, it paved the way for partnerships with other post-secondary institutions around the world. NSAC welcomed its first FAFU students to campus in 2005 and the partnership continues to flourish.

As part of the agreement, Claude traveled to China annually to deliver courses on the FAFU campus. He has continued to do so in his retirement. He gets to know the FAFU students well and has always been a familiar face for them when they arrive at the Faculty of Agriculture, helping to make them feel at home in Canada.

Such has been his impact that four of his former graduate students have taken it upon themselves to establish two student awards to honour his contributions.

Dr. Yunfei Jiang (Class of '13), Libiao Gao (Class of '13 and '15), Jili Li (Class of '08 and '10) and Dr. Xue Pan (Class of '10) all came to Canada to pursue studies in agriculture and worked under Claude's supervision.

"As former graduate students under the supervision of Dr. Caldwell, we wanted to establish these awards to honour the tremendous contributions he has made to international collaboration programs and agriculture," says Dr. Yunfei Jiang.

Dr. Yunfei Jiang and Dr. Claude Caldwell are pictured here with the 2022 recipients of the Dr. Claude Caldwell Agriculture Awards. L to R: Jack Pauley (Claude's grandson), Yuxuan Tang, Zheya Lin, Dr. Yunfei Jiang and Dr. Claude Caldwell.

"We also wanted to make the awards as inclusive as possible, so that more students would be eligible. Undergraduate and graduate students both need financial support."

Yunfei, Libiao, Jili and Xue have committed to funding the awards for five years. For the duration of this time, recipients of the awards will receive \$1000 to put towards their studies.

Yuxuan Tang completed her BSc (Agr) in environmental sciences in May 2023, and was the first recipient of the Dr. Claude Caldwell Undergraduate Agriculture Award, presented at the scholarship banquet in November 2022. She says receiving the award not only reduced the financial burden of going to university, but also encouraged her to keep working hard and continue her studies.

"Receiving this scholarship gave me more time to devote to my research and studies," says Yuxuan. "I hope to apply what I have learned in my program to practical problems including addressing environmental pollution, ecological damage and resource waste."

Yuxuan completed an honours degree with a project that examined biostimulants derived from organic wastes. She is now pursuing her Master of Science at McGill University.

Zheya Lin is pursuing a PhD in agricultural sciences and was the first recipient of the Dr. Claude Caldwell Graduate Agriculture Award, presented at the scholarship banquet in November 2022.

Under the supervision of Dr. Gordon Price, Zheya's research focuses on understanding how biosolids contribute to carbon storage in agricultural contexts to fully comprehend how to optimize the use of these underused organic materials. This includes techniques and modeling for predicting soil properties using mid-infrared spectroscopy.

"This award has greatly impacted my life by allowing me to spend more time focusing on my studies, rather than working on and off campus to afford my education," says Zheya. "It also allowed me to get involved on campus and in the community. I have volunteered to participate in Community Day, teaching children about science, and I have worked at the Truro Farmer's Market."

"I can hardly find the right words to express my gratitude to the donors of the Dr. Claude Caldwell Agriculture Awards."

Dr. Dick Huggard, Dr. Les Haley and Dr. Garth Coffin

The Faculty of Agriculture mourns the loss of three prominent alumni, industry and campus leaders, and dedicated friends of NSAC and the Faculty of Agriculture.



Richard (Dick) Huggard – Class of '56

Richard James (Dick) Huggard was an invaluable asset to the agriculture industry in Nova Scotia. Through his decades of leadership and engagement with farmers, industry groups, and scientists, Dick has been touted as one of the best ambassadors for agriculture that Nova Scotia has ever had.

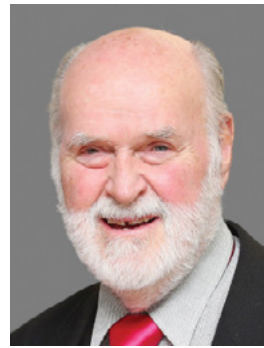
Born in 1935 in Norton,

New Brunswick, Dick attended NSAC followed by Macdonald College of McGill University, and earned his BSc(Agr) in Animal Husbandry in 1958. He completed a Master of Science degree in 1965 from the University of Illinois. Dick spent his career working for the Nova Scotia Department of Agriculture, where he held the positions of livestock fieldman, provincial livestock superintendent, director of livestock services, director of extension services, chief director of operations, executive director of administration, and finally, deputy minister of agriculture and marketing, a position he retired from in 1994 after 36 years of service to the province.

Dick's development of agricultural organizations continues to benefit the people of Nova Scotia. A passionate supporter of the 4H program, Dick helped establish the first provincial 4H Leaders Council and Nova Scotia 4H Show, cornerstones of the provincial program. Other organizations including the Atlantic Agricultural Hall of Fame, Canadian Agricultural Hall of Fame, the Nova Scotia Institute of Agrolgists, both the Eastern Branch and Canadian Societies of Animal Science, the Agricultural Institute of Canada, and the Canadian Agri-Food Research Council benefited from his expertise and passion for agriculture. During his career he was instrumental in creating new initiatives, including the first Young Farmers Conference, the Farm and Safety Committee, and the Provincial Farm Women's Conference.

Dick was recognized by many organizations for his accomplishments, including the Agricultural Institute of Canada, the Nova Scotia Institute of Agrolgists, the Women's Institute

of Canada, the Canadian Society of Animal Science, and the Canadian Society of Extension. NSAC's Alumni Association named him Distinguished Alumnus in 1999, and in 2006 he became Dr. Huggard when he received an honorary Doctor of Laws degree, conferred jointly from NSAC and Dalhousie University. He was inducted into the Atlantic Agricultural Hall of Fame in 2015.



Dr. Les Haley – Class of '58

Dr. Les Haley was a graduate of the NSAC Class of '58 and the ninth principal of NSAC. He was born in Windsor, Nova Scotia and attended NSAC followed by the Ontario Agricultural College where he received a BSc(Agr). He went on to complete a Master of Science in genetics and animal breeding at OAC and following this, completed a PhD in genetics from the University of California, Davis.

Dr. Haley returned to Canada in 1967 and began a long and successful career in academia followed by a short time in the public service. After a brief stint as an assistant professor of biology at the University of Saskatchewan, he became a faculty member at Dalhousie University, where he remained until being appointed NSAC principal in 1989. During his time at Dal, Dr. Haley served as assistant professor in the Department of Biology, student advisor and supervisor to graduate students, assistant dean of the Faculty of Arts and Science, chair of the Department of Education, vice president of finance and administration, and director of the School of Education.

From 1989-1996, Dr. Haley served as NSAC's ninth principal, and in this role he was heavily focused on increasing student numbers. Under his leadership, enrollment reached nearly 1000 students, a first at the time. He encouraged the development of an aquaculture option in the BSc(Agr) program along with the addition of new space for aquaculture instruction and research. He was one of the collaborators who developed the co-operative Master of Science program in agriculture with Dalhousie, and he promoted expansion in research activity and graduate enrolment. He led the development of several industry research chairs.

In April 1996 Dr. Haley was appointed deputy minister of the Nova Scotia Department of Agriculture and Marketing, a role from which he retired in 1998. This was during a period of reduced funding for provincial departments, and Dr. Haley was instrumental in consolidating the department and regrouping the delivery of several services.

In recognition of his service, in 2002 NSAC renamed the Animal Science building as the Haley Institute of Animal Science and Aquaculture. Dr. Haley was named Distinguished Alumnus by the Faculty of Agriculture's Alumni Association in 2017.



**Dr. Harold (Garth) Coffin –
Class of '60**

Garth Coffin chose to attend NSAC after being selected national winner of the Eaton Agricultural Scholarship in 1957. Following this he moved on to Macdonald College where he completed a Bachelor of Science in agricultural economics, and then on to the University of Connecticut where he earned both a Master of Science and a PhD in agricultural economics.

Garth returned to PEI to work for the provincial government, but soon returned to Montreal to become director of Economic Research and secretary to the Canadian Livestock Feed Board, a Federal Crown Corporation. He held this position for eight years before returning to work in the academic world at Macdonald College.

Garth remained at McGill for 18 years, serving as associate dean research and acting dean of the Faculty of Agricultural and Environmental Sciences before being offered the job as principal of the Nova Scotia Agricultural College in 1996.

Dr. Coffin was appointed principal to NSAC during particularly hard financial times. Despite serious staff reductions and cutbacks in the provincial budget to the campus, at the beginning of his tenure, he grew NSAC's budget significantly, to an extra \$1.5 million. During Garth's tenure, the value of all student scholarships awarded at NSAC tripled and research funding increased to 2.5 times larger than before he arrived.

His leadership and vision over his six-year tenure helped shape the reputation of NSAC and inspired a generation of students to broaden their view of the world through international development work and student exchange. Garth appointed NSAC's first dean of internationalization. With this appointment, NSAC became highly recognized for its international involvement, a characteristic that is still evident on campus today. He also introduced the External Relations office at NSAC.

Garth's professional memberships were too numerous to list. He gave freely of his time and expertise to numerous industry associations and committees, including the Canadian Agricultural Economics and Farm Management Society, the Northeastern Agricultural and Resource Economics Association, the American Agricultural Economics Society, and the International Agricultural Economics Association, to name just a few. Similarly, in his personal life, volunteer work was hugely important to him, and he was a committed Rotarian.

Dr. Coffin was named Distinguished Alumnus by the Faculty of Agriculture's Alumni Association in 2014.

In Memory

The Faculty of Agriculture and the Alumni Association acknowledge the passing of the following alumni. We extend our deepest sympathy to family, friends and classmates.

Dr. Arthur (David) Crowe - 1942	Walter Ross - 1961
Vernon Heighton - 1942	Douglas Feltmate - 1961
Bruce McKenzie - 1943	John MacDonald - 1961
Graydon Cox - 1944	Russell Ward - 1961
Malcolm Crone - 1949	Donald Bauchman - 1962
Dean Read - 1949	Walter Thompson - 1963
Reginald Saunders - 1950	Chester Van Der Kooi - 1963
Donald Miller - 1953	Walter Leslie - 1965
Stewart Hoare - 1954	Brian Mahoney - 1968
Graham Dickie - 1955	David Carruthers - 1969
Lawrence Bishop - 1955	Ivan Joseph - 1973
Dr. Richard (Dick) Huggard - 1956	Philip Pedersen - 1973
Dr. Leslie Haley - 1958	Weldon Smith - 1973
Dr. Wendell Grasse - 1959	Blair MacCallum - 1974
Garth (Jim) McCulloch - 1959	Ivan Trafford - 1975
Dr. Harold (Garth) Coffin - 1960	Peter Wile - 1975
Robert (Bob) Wright - 1960	Robert Cogswell - 1976
Marcis Balodis - 1961	Michael Johnson - 1980
Dr. Robert MacKenzie - 1961	Darlene (Lynn) Cameron - 1986
	Melanie Maxwell - 1991
	Lori Ansems - 1994
	Nathan Archibald - 1999
	James (Jim) Martin - 2000

Make a memorial gift

Honour a classmate or a friend with a memorial gift to the AC. Your thoughtful gift will be used to support student scholarships or bursaries, to improve campus, or to support an area that is of importance to you or your honouree. An acknowledgement of your gift will be sent to the family of the deceased. For additional information on memorial gifts, please contact Donor Relations at 902.893.6721. Make a gift online at dal.ca/giving.

Alumni Association Board of Directors

The Alumni Association's Board of Directors is made up of nine keen individuals with varied experiences at the Faculty of Agriculture and in the agriculture industry. Get to know them below.

Robyn McCallum - Chair - Class of '13

Robyn graduated from Dal AC in 2013 with a BSc(Agr) in Animal Science and obtained her PhD (biology) through Dalhousie University. Throughout her studies, she was actively involved in student government, including serving as president of the Dalhousie Agricultural Students' Association for three years. Upon her undergrad graduation, Robyn was named life president of her graduating class.

Robyn is based in northeastern New Brunswick and grows crops and exhibits Belgian horses with her family. Robyn is currently the president at the Miramichi Salmon Association (MSA).

Brian Crouse - Vice Chair - Class of '76

Now happily retired, Brian Crouse is serving his second term on the board of directors, and currently serves as vice chair. Following 10 years with the NS Department of Agriculture, AC grads from 1986 and later will remember his varied career with Student Services. A long-time canvasser for the Heart & Stroke Foundation, he was proud this year to be the top fundraiser in Nova Scotia during the February Heart Month campaign. Brian enjoys serving on the Alumni Association's board as it provides the opportunity to keep connected with campus, alumni, and the students and families he worked with over the years.

Nathan Murray - Secretary - Class of '11

Nathan grew up on his family's hog and potato farm in Borden-Carleton, PE, and graduated from NSAC with an agricultural business degree in 2011. As a student, Nathan was active in campus life, serving as both VP finance and president of Students' Union (now DASA). Upon graduation he was elected life president of his class. Since 2012, he has been living in Regina, SK, where he works in IT at FCC.

Ryan Barrett - Class of '02

Ryan graduated with a BSc(Agr) from the Dalhousie Faculty of Agriculture in 2002 and an MSc from the University of Guelph in 2004. He has worked with the PEI Potato Board since 2012 after previously working in the purebred dairy cattle industry. Ryan also continues to be involved in his family's dairy farm in Belmont Lot 16, breeding registered Milking Shorthorns. Ryan serves as secretary-manager of the Canadian Milking Shorthorn Society. He is also a professional agrologist and serves as the president of the PEI Institute of Agrologists. He is a certified crop advisor for the Atlantic Provinces and serves on the board of directors for the Potato Association of America, the Prince Edward Island 4-H Council, and the Eastern Canadian Oilseeds Development Association (ECODA).

Shelly Juurlink - Class of '01 and '04

Shelly graduated from NSAC in 2001 with a BSc(Agr), in 2004 with an MSc in Animal Science and in 2010 with a Co-op Management Certificate (CMC) from the Schulich School of Business at York University. During her years at NSAC, she was active on several committees and was a member of the Woodsmen team. Over the years, she has held a variety of agricultural related positions working with farmers in various places including Nova Scotia, Manitoba, Quebec, Ontario and West Africa. Currently, Shelly and her husband, Perry, live in Fall River with their two children.



Geneve (Gardner) Newcombe – Class of '86

Geneve graduated from NSAC in 1986 with a BSc(Agr) in Animal Science. Geneve and her husband Craig (Class of '86) reside in Port Williams, NS where they operate Cornwallis Farms Ltd along with Craig's brother Brian and wife, Edna. Geneve and Craig have three adult children, one of whom is also an NSAC graduate.

Dale McIsaac – Class of '73

Dale was raised on a potato and beef farm in Florenceville, New Brunswick. After graduating from high school, he attended NSAC, graduating in 1973. He then attended Macdonald College of McGill University, graduating in 1975. In his career, Dale has worked for government and private industry in Atlantic Canada as seed potato specialist, horticulturist, and maple and wild blueberry extension specialist. Dale is now retired and lives in Truro. He enjoys volunteering, hiking, reading, and visiting with family and friends in New Brunswick, Nova Scotia and Toronto.

Mark Rose – Class of '06 and '09

Mark grew up in Northeastern Newfoundland and graduated from NSAC with an animal science degree in 2006. Not growing up around agriculture, Mark found his love for agriculture and in particular the dairy industry thanks to the years spent at NSAC. In 2009 he graduated with a MSc focused on ruminant nutrition. Mark works with Lely North America as Farm Management Support specializing in their automated feeding products. He and his wife Beth (Class of '07) live in East Hants, NS.

Breagh Ross – Class of '15

Bre graduated from Dal AC in 2015 with a BSc(Agr) in environmental sciences. Throughout her studies, she was actively involved in campus life, including being captain of the Woodsmen team, social coordinator of Chapman House, and Off Campus president. Since 2015 she has been working with Farm Credit Canada and is currently located in Kentville, NS.

Honouring our retirees

Undeniably faculty members, instructors and staff have a tremendous collective impact on student experience at the Agricultural Campus.

They've helped shape us as individuals – advising, pushing and challenging us, guiding us to further education or on career paths, and supporting us through our time as students and beyond. In many cases, they've also become our friends.

We would like to acknowledge the recent retirements of the following faculty and staff members from our campus.

David Lowe – Facilities Management (Winter 2020)

Tom Cole – Facilities Management (Spring 2020)

Cathy Myette – Athletics (Fall 2020)

Darwin Carr – Department of Plant, Food & Environmental Sciences (Spring 2022)

Laurel MacIntosh – Department of Animal Science and Aquaculture (Summer 2022)

Diane Ross – Facilities Management (Summer 2022)

Wayne Paquet – Registrar's Office (Summer 2022)

Natalie Cole – International (Fall 2022)

Mark Mason – Student Services (Fall 2022)

Tracey Murdock – Dal AC Farm (Fall 2022)

Dr. Peter Havard – Department of Engineering (Summer 2023)

Les Hefler – Facilities Management (Summer 2023)





Working with nature for a sustainable future

Dr. Andrew Hammermeister

Finding sustainable and ecological solutions that have an impact on all of agriculture is a passion of Dr. Andrew Hammermeister, director of the Organic Agriculture Centre of Canada located on the Dalhousie Agricultural Campus.

With a background in soil science, Andrew was influenced by an organic farmer he met during his first summer after graduation.

“He just spoke so passionately about the land and the environment he had created,” said Andrew. “He was pointing out all the butterflies, birds, bees and deer and it was this beautiful place he shared with other organisms on the planet,” he added. “It stuck with me, seeing the multi-functionality of the landscape, his whole approach of working with nature was something different.”

Founders of the organic movement are very committed to the relationship between soil health and plant and animal health, and having healthy soil will result in healthy and happy people and animals. Recycling waste materials and promoting and enhancing biodiversity are tools to reduce the need for inputs including fertilizers and pesticides.

“I love the idea of organic,” said Andrew. “What I’ve found in the last number of years is that organic really tends to be a model of a sustainable form of agriculture and it sets itself apart with that goal well before a lot of the other more modern conservation movements,” he added.

Health, Ecology, Fairness, and Care

The more modern organic movement has four principles including Health, Ecology, Fairness, and Care and these guiding principles act as a model for what sustainable agriculture could and should look like. These principles have been adopted and implemented by organic farmers in over 180 countries around the world.

“There are two things in my mind that organic agriculture highlights – one, it forces us to find ecological solutions to agriculture challenges, and two, it highlights the trade-offs in sustainability. If we want to have a more ecological farming system, there may, for example, be lower yields. So, there are trade-offs in a whole food system, and if we want to have a sustainable food system, we can’t necessarily have it all.”

Ecological solutions include increasing seeding rates, growing resistant varieties, adopting crop rotations more rigorously and incorporating natural pesticides and biological controls. Plants and animals need to be healthy and resilient to stressors.

“What I like about organic is it forces us to think outside of the conventional box and try to find solutions within what I would describe as ecological limits. Good, truly natural solutions,” added Andrew. “We should strive to find approaches to increasing yields while working within ecological limits.”

Organic Agriculture Centre of Canada

The Organic Agriculture Centre of Canada (OACC) tries to build scientific integrity and capacity within the country for organic agriculture and research to support credible choices within the organic movement.

In 2009, the OACC began its first Organic Science Cluster with the Organic Federation of Canada as industry partner, and just recently completed its third \$12 million cluster including 27 research projects across the country with 79 researchers, 40 graduate students and 74 industry partners.

“One of the interesting things about organic is that it is very systems-oriented, so we really need to understand the relationship between soil, crop, livestock, and pests, but it’s also about all of agriculture. So, when we are working on an Organic Science cluster, it includes farmers, researchers, and industry partners across all commodity groups. Researchers are interested in finding more sustainable and ecological solutions, and they see organic as a platform for first developing those solutions and then launching them to have impact on all of agriculture,” said Andrew.

Andrew also sits on the National Standards Committee for Organic Agriculture and is about to embark on its next five-year review process.

“We can’t shift all of agriculture, but by focusing on alternative, ecological solutions, we can contribute to improving the sustainability of all of agriculture – it just makes sense.”

To learn more about OACC and the Organic Science Cluster visit: www.dal.ca/oacc.

A renaissance in soil mapping

Dr. Brandon Heung

Dr. Brandon Heung likes thinking about soil.

“I certainly liked digging holes and things like that as a kid, but I guess a lot of my interest in soil is that it is the interface of many of our vital earth system processes,” he explained. “Soils are the center of my universe. The better our soil functions, the better everything works because soil security is related to water security, food security, energy security and ecosystem services. Soil is everything when you think about it.”

Dr. Heung’s work falls under the umbrella of digital soil mapping and understanding how soils change over space and time.

“As far as I know, I’m the first PhD student that did predictive soil mapping focusing on machine learning in Canada.”

Soil mapping is just as it sounds. It’s an actual map that shows the various types of soil properties that are of interest to various stakeholders. But Dr. Heung takes things one step further.

“I do things related to modeling soil status, so what is the state of our soil right now? Looking at techniques to monitor soil change and looking at how well the soil functions based off soil properties,” he explained.

He then transforms that data into knowledge that will help a farmer or a forester or even a higher-level policy maker in terms of defining their carbon policy and climate change mitigation strategies.

Indicators of soil health

Understanding soil health over space and time and threats to soil health is an important predictor of long-term viability of soils.

Erosion is a major concern. Dr. Heung maps and models soil erosion and redistribution over the landscape. Another major concern is decline in soil organic matter, especially in Eastern Canada. Dr. Heung looks at the spatial patterns in those declines and the hot spots of decline. This then provides a tool for policy makers to prioritize their actions or mitigation strategies.

“If we are able to map things like the carbon sequestration potential of soil for example and if they are the right mitigation strategies, there may be ways to put more carbon back into the soil using best management practices,” he explained. “While our soil may be a source of greenhouse gases, it’s also the ultimate nature-based solution towards climate change mitigation,” explained Heung. “Because the soil constitutes the largest terrestrial pool of carbon, I think there’s a lot of opportunity.”

Dr. Heung also works in forestry and forest productivity and in particular growth and yield modeling in forests. “So where should we plant trees to maximize carbon sequestration and optimize tree growth? Some of the work that I’m doing in British Columbia, Ontario, and Nova Scotia is related to predictive ecosystem modeling.”

What he and his team are doing is trying to model the types of ecosystems, which effectively will help develop their forest resource

inventories, predicting how trees will grow in the future, and where to plant trees to optimize their potential.

Dr. Heung and a group of Dalhousie researchers recently received funding from the Forestry Innovation Transition Trust to undertake research on Nova Scotia’s forests over the next five years.

“We’re trying to understand carbon dynamics within the forest, looking at how much carbon we can sequester into the soil,” he said. “I like trying to understand the relationship between the environment and soil.”

Dr. Heung is also co-chair of a national network of soil scientists or soil mappers known as the Canadian Digital Soil Mapping Working Group – a subsidiary of the Canadian Society of Soil Science whose efforts are directed at coordinating national soil mapping efforts.

In terms of advancing soil mapping, Dr. Heung believes soil spectroscopy is the next big thing and a priority area for sustainable soil management from local-to national-scales because the new technology will enable the measurement of soil properties in a more cost effective and time efficient way.

Soil spectroscopy examines the electromagnetic characteristics of soils to predict soil properties.



Needle is shifting

How soil functions and how soil management can sustain this function is the idea behind the Centre for Sustainable Soil Management recently established on the Dalhousie Agricultural Campus, led by Dr. David Burton, of which Dr. Heung is an integral part.

The Centre builds on the extensive experience of a team of faculty members experienced in research and teaching on soils in agricultural, forestry and urban environments.

Nationally, the Senate Standing Committee on Forestry and Agriculture is currently completing a study on the status of soil health in Canada. Globally, the Global Soil Partnership emerged out of the Food and Agriculture Organization of the United Nations.

“For me, the most important part of soil mapping and carrying out this national level work is having a team of similar-minded folks that value the importance of collaboration and teamwork,” he said. “We’re working very closely with colleagues at the University of Guelph that are experts in spectroscopy and also soil organic matter characterization and soil chemistry.”

This helps to provide the analytical capacity, a very valuable piece of the puzzle.

“It’s about how everything fits together - which is what I’m interested in - just like a map.”

Blue and Gold Awards

During our annual Blue & Gold Alumni Awards dinner, three very deserving alumni were honoured for their outstanding service to their alma mater, the agricultural industry, their communities and beyond.



2022 Young Alumni Achievement Award winner Ryan Barrett (Class of '02) and family.

YOUNG ALUMNI ACHIEVEMENT AWARD

Ryan Barrett (Class of '02)

The Young Alumni Achievement Award recognizes the outstanding achievements of Faculty of Agriculture alumni aged 40 and younger. Alumni are recognized for outstanding achievement that may have earned them regional, national or international prominence through service to humanity in their profession or volunteer organizations, through community service or the advancement of knowledge and service to the Faculty of Agriculture.

Ryan Barrett, a professional agrologist, is the research and agronomy specialist with the Prince Edward Island Potato Board. In this role, Ryan coordinates local and national research projects with several different partners as well as conducting on-farm research trials with several PEI potato growers.

Ryan is the president of the PEI Institute of Agrologists and serves an executive role in several different organizations, all while staying involved in his family's dairy farm, breeding registered Milking Shorthorns.



2022 Alumni Volunteer of the Year Award winner Valerie Carmichael (Class of '70) and family.

To view full video citations visit dal.ca/agalumni.

ALUMNI VOLUNTEER OF THE YEAR

Valerie Carmichael (Class of '70)

The Alumni Volunteer of the Year Award honours a volunteer who has consistently and enthusiastically donated their time and talents to advancing the objectives of the Faculty of Agriculture or the Alumni Association.

Valerie Carmichael is the owner/manager of C&M Farms Ltd., a 100-cow dairy farm in Williamstown, New Brunswick. While busy in this role and others throughout her career, Valerie continually gives back to her community through her expertise in agriculture, food, and youth.

Trained in youth engagement and suicide intervention, Valerie engages with many youth groups including 4-H, her church and Rotary. She was the national rep for the NB Breakfast for Learning Council, the president of the NB Association of Food Banks, and chair of the Woodstock Young Adult Health Coalition, among many others.



2022 Distinguished Alumnus Award winner Charles Keddy (Class of '73) and wife Doris.

DISTINGUISHED ALUMNUS

Charles Keddy (Class of '73)

The Distinguished Alumni Award is the Faculty of Agriculture's most prestigious award, recognizing truly outstanding service and commitment to the Faculty of Agriculture, industry and the Alumni Association.

Nominees must be eligible for membership in the Faculty of Agriculture Alumni Association and have distinguished themselves in their area of expertise, bringing honor to the university. Nominees will have provided a positive role model for Faculty of Agriculture and agriculture and made a significant contribution to the industry through teaching, research, industry, extension, production or to society in general.

Since 1977, Charles Keddy and his wife, Doris, have built a successful business known as C.O. Keddy Nursery Inc. while raising three children. From the first crop harvested off two acres and sold locally to today, C.O. Keddy Nursery Inc. is a successful business growing 110 acres of nursery stock shipping across North America. The farm continues to grow and expand in Lakeville, NS.

Reunions

Class of 1953



Members of the Class of 1953 gathered at the Agricultural Campus in July 2023 to celebrate their milestone 70th reunion.

Class of 1960/61/62



Members of the classes of 1960, 1961 and 1962 gathered at the Old Orchard Inn in Wolfville, NS in August 2022 to celebrate 60+ years as NSAC alumni.

Class of 1967



Members of the Class of 1967 gathered at the Agricultural Campus during Homecoming Weekend in October 2022 to celebrate their 55th reunion back where it all started.

Class of 1972 Agricultural Engineers



The 1972 class of agricultural engineers from NS Technical College, all previous grads of NSAC, gathered in Kentville, NS in May 2023 to celebrate their 50th reunion.

Dean's Receptions

Our regular Dean's Receptions continued through 2022 and 2023 with events in Port Williams, NS, St. John's, NL, Ottawa, ON, Hunter River, PE, and Truro, NS. Pictured are door prize winners at the Dean's Reception in Truro. Join us at an event near you! Visit dal.ca/agalumni for an updated listing of events.



Open Dialogue Live

In November 2022, the Office of Advancement partnered with the Faculty of Agriculture to host Open Dialogue Live: How policy impacts food security. This in-person and online panel brought together Department of Business & Social Sciences faculty members Dr. Chris Hartt, Dr. Phoebe Stephens and Dr. Gumataw Abebe, along with policy analyst Cassie Hayward to discuss food policy and its impact on food security both within Canada and globally.



Community Dinners

The popular Aggies in the Community dinners continued in fall 2022 and spring 2023. The Happy Harvest dinner, pictured below, brought together over 100 students, staff, faculty, alumni and community members in October to enjoy a chef-curated five-course menu featuring fresh produce from the *Sustain* by Cultiv8 farm.

Sweet on Strawberries, offered in June, took guests on a journey with their tastebuds as they learned about the local strawberry industry from alumni speakers and campus experts. Strawberries from Millen Farms were featured in the meal, along with other alumni products.



A Ring that Connects

Barley Party 2023

**Graduating students were honoured
March 31, 2023 at the annual Barley Party
with 81 rings presented.**

Established in 2010, the Barley Party is the annual celebration for students who have purchased a Barley Ring – the Faculty of Agriculture’s widely recognized graduation ring. Held in Jenkins Hall on campus, students and their supporters enjoyed a delicious meal, and one-by-one were called to the front of the room to accept their Barley Ring.

Students were also welcomed to the Agricultural Campus Alumni Association by Dr. Robyn McCallum, chair of the Alumni Association.

“This ring means so much to me,” said Dr. Robyn McCallum, Class of ‘13 and ‘17. “It reminds me of my time at the AC, how agriculture has shaped me, and how I’m part of the AC community. I wear my Barley Ring with great pride,” she added.

Coming back to the Barley Party as the Alumni Association chair is special for Dr. McCallum as 2023 marks ten years since she first graduated from the Faculty of Agriculture.

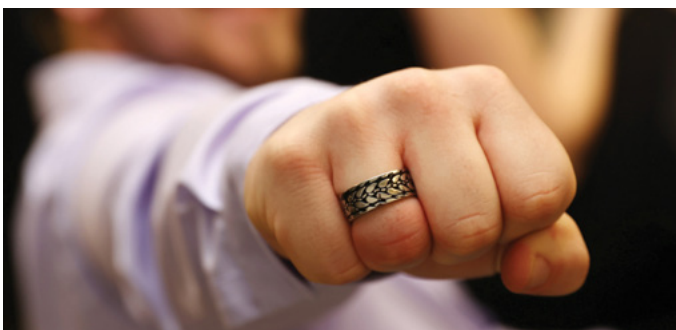
“Seeing the Barley Party grow to this level – filling Jenkins Hall, watching families receive the ring together – is truly special. I am honoured to still be involved with the AC in this way,” she said.

One such family is the Briggs family from Plaster Rock, New Brunswick. Allyson served as president of the Dalhousie Agricultural Students’ Association during her final year and graduated with a degree in agricultural business. Her dad, Derek, graduated in 1998.

“It was special to receive my ring with my dad,” said Allyson. “He’s been a major role model for me throughout my life, and I can attribute a lot of my love for the AC and the agriculture industry to him,” she added. “I vividly remember growing up and hearing him speak fondly of his memories at the AC, and I’m happy to now have my own memories to share with him. I’m so excited to be joining him as an alum!”

Allyson is attending the University of New Brunswick in the fall to study law. Her dad Derek is vice president business banking, BMO Financial Group in Plaster Rock.

Brother and sister duo Gabby and Hans Schenkels also received their rings, following in their father John’s footsteps (Class of ‘91).



Clockwise from top left: graduating student Makayla Crowell sporting her new Barley Ring; Allyson Briggs and dad, Derek Briggs (Class of ‘98) receiving their rings together; Alumni Association chair Dr. Robyn McCallum (Class of ‘13) addressing graduating students; a newly minted Barley Ring.



Clockwise from top left: brother and sister duo Gabby and Hans Schenkels receiving their rings together; 2023 honorary ring recipient Dr. Peter Havard receiving his ring; past honorary ring recipients Dr. Derek Anderson, Dr. Janine Gray, Judy Smith, Alisha Johnson, Patricia Jeffcock, Dr. Jin Yue and Dr. David Gray celebrating at Barley Party.



Growing up on the Schenkels Farm in Miramichi, NB, influenced both Gabby and her brother. Gabby hopes to contribute to the fight against climate change and joined the New Brunswick Soil and Crop Association as their north shore agro-environmental coordinator in May while Hans received his Diploma in Dairy Business Management.

“It was really fun to receive my ring with Hans, we’ve both made great friends here and have learned a lot,” shared Gabby. “It was great to be able to have my family always with me. Hans went out west to work immediately following Barley Party, so I was happy to be able to share this experience with him before he left.”

In addition to the rings presented to students, a special ring was also presented to a deserving individual who wouldn’t ordinarily be eligible to receive one.

Honorary rings are awarded to those who do not meet the criteria to be eligible for a Faculty of Agriculture ring but who are extremely deserving of the honour. These individuals are ambassadors and supporters of the institution and have made outstanding contributions to the Faculty of Agriculture community.

This year’s honorary ring recipient is an institution on campus. Dr. Peter Havard is the longest-serving faculty member at the Faculty of Agriculture (although not the oldest, which is an important distinction).

Over the past 46 years, Peter has served multiple stints as chair of the Department of Engineering. Taking this role on more than once speaks to the kind of person he is – diligent, patient, and more than anything, committed. Peter is a professional engineer and a lifetime member of Engineers Nova Scotia because of his long-standing service to the profession. He has a deep

appreciation for the agriculture industry, agricultural engineering, and specifically, apple orchards.

There has been much change at the AC since Peter first started, but at least one thing remains the same: Peter’s care for his students. He is approachable and kind. He is always excited to answer their questions, and his interest in student learning goes beyond the classroom.

Many students can tell you no real due date exists with Peter. If they are willing to put the time and the work into an assignment, he is willing to make the time to ensure they receive credit for it. He is less concerned about grades and far more concerned about his students’ ability to understand a concept.

It is not uncommon for students to approach Peter for help with classes he does not even teach, as he is willing to go out of his way to explain a concept. Peter is one of the first professors that engineering students encounter in their first year, and it does not take long for students to begin viewing him as a fatherly figure. Students will strive for high grades, not only for their personal success, but to make Peter proud.

Peter shares with students the best advice he was given as an engineering student: “just give it your best shot.” This advice is accompanied by his unwavering care and support.

Dr. Havard was presented his ring earlier in the day by DASA Executive Georgie Gunn, Allyson Briggs, Tim Ching and Isaac Ayer.

Other past honorary ring recipients were also in attendance to celebrate the Class of 2023 – linking the past with the present, a common passion for agriculture and education and a ring that connects them all.



Convocation 2023

Years of academics and extracurriculars came to a grand finale for over 140 graduates on May 29, 2023 during Convocation ceremonies at the Faculty of Agriculture.

As part of graduation activities, every year the graduating class elects those who will serve as Life Executive during Convocation and going forward into the future.

Meet the Life Executive for the Class of 2023: Life President Gabrielle Schenkels, Life Secretary Baillie Lynds, and Valedictorian Isaac Ayer.

Life President

The life president is the main representative of the class who will work with other life officers and the Faculty of Agriculture Alumni Association to ensure the interests of the class are being observed in the matters of finance publicity, reunions, and fundraising.

"I am very honoured to have been selected by my peers," said Gabby. "In my short time at the AC, I always felt welcomed and included, and I will be carrying this forward through our efforts as an alumni class. I think everyone in our class has unique talents and skills and all have something different to offer the world of agriculture. I can't wait to see what we can all accomplish in time."

Gabby received the Alumni Family Bursary and Dr. Robert G. Rix Family Farm Bursary this year. She received the Faculty of Agriculture Leadership award as well as the SAIL award for Outstanding Student Leader in Club Affairs.

Life Secretary

The life secretary will provide the link between the class and the Faculty of Agriculture Alumni Association. They will handle correspondence with the class executive and coordinate the mechanics of the class mailing list for special class events and alumni gatherings.

Baillie Lynds, from North River, NS, grew up with a connection to the AC as her mom Jean is an alum (Class of '90) as well as operations manager at the farm on campus. Baillie plans on continuing her studies after graduation by pursuing her MSc in dairy nutrition on campus working towards helping reduce greenhouse gas emissions to reach net zero by 2050.

"Growing up I was able to get involved in campus activities where I experienced the close-knit AC community," she explained. "I often say I knew where I wanted to go before I knew what I wanted to do."

Agriculture has always been in Baillie's family. Her grandparents were dairy and beef farmers, her mom works at the campus farm, and both her mom and brother are alumni, all of which sparked an interest in agriculture... and she wanted a barley ring!

"It is an honour to be selected by my classmates as the Class of 2023 life secretary. I look forward to maintaining the connection between the class and the alumni office and celebrating the accomplishments of my classmates who I know will go on to make a difference," she added. "My time at the AC has been an amazing experience and I will never forget the friends and memories I have made."

Baillie has been the recipient of multiple scholarships and bursaries including the Ali Brown Scholarship in Food Science, Alumni Family Bursary, Dorothy Creelman Cox Scholarship, GG Smeltzer Memorial Bursary, Isgonish IODE Bursary, Kings Mutual Insurance Scholarship, Paul C. Eaton Memorial Scholarship, Raymond Loo Scholarship in Organic Agriculture, Renee Covill Scholarship and the Roger Tremblay Memorial Scholarship.

Valedictorian

The valedictorian is given the honor of representing all graduating students to the Faculty of Agriculture and the community during Convocation ceremonies through the delivery of an address.

Isaac Ayer grew up on his family's farm in Sackville, NB, where they raise cattle, sheep, and other livestock.

"Agriculture has always been an integral part of my life as I have actively worked on the farm for as long as I can remember in whatever role was appropriate for my age," he explained. "I've always enjoyed working with animals, being outdoors, and watching my hard work pay off as the animals and crops grew around me."

His passion for farming led him to the AC to a degree that offered the knowledge and skills he could apply on the farm while opening doors to other opportunities in the industry. In fact, the AC was the only school to which he applied.

"The BSc(Agr) degree with an agribusiness major promised a blend of science and business courses that I couldn't get with just a science or business-focused degree," he said. "I also wanted to take the many ag production-based classes the school offers that couldn't be found at any other school in the region."

While Isaac doesn't have concrete plans just yet, he has returned home to work on the farm where he plans to play an active role while also being open to exploring different paths and opportunities as they arise.

"It is an honour to be an AC graduate and to have been chosen as valedictorian," said Isaac proudly. "These accomplishments are a testament to the incredible group of peers, instructors, and family that have supported me over the years as well as the hard work I have put in along the way," he added. "As an AC grad I will be joining a special community of alumni including many individuals I've had the privilege of meeting over the past four years and plenty more I look forward to meeting in the future."

Isaac was the recipient of a student leadership award for his role in student government on campus as well as the Edward Brown Memorial Undergraduate Scholarship.



Class of 2023 Life President Gabby Schenkels.



Class of 2023 Life Secretary Baillie Lynds.



Class of 2023 valedictorian Isaac Ayer.



Growing meets graduation

This past February, members of the Dalhousie Agricultural Students' Association (DASA) executive, along with Cynthia Parks (Class of '81), a senior instructor in the Department of Plant, Food, and Environmental Sciences, held a planting party.

"I was happy to assist Allyson Briggs, DASA president and the Class of 2023 with a plan to grow their own centerpiece arrangements for their graduation banquet," said Cynthia.

Rooted cuttings were transplanted into pots and soil provided by the Plant, Food, and Environmental Sciences department. Spider plants and Bolivian tradescantia were arranged along with vases of dried barley collected from the Demonstration Garden this past September.

Green plants and barley centrepieces provide a fitting symbol for the Dalhousie Faculty of Agriculture.

As the plants grew over the past year in the greenhouses so too did the Class of 2023. This spring, the flowers were used as decorations during graduation celebrations.

"We are hoping this can become a new AC tradition," said Allyson Briggs, DASA President. "It symbolizes the growth of students throughout their time at the AC."

What We Do Matters

Alex and Lindsay Brown (Class of '11) are first-generation dairy farmers. With two licenses, a combined total of nearly 200 registered Holsteins and three children, life is busy.

"I grew up on a dairy farm in Shubenacadie and graduated from the NSAC in 2011 with a degree in agricultural business," explained Lindsay. Since graduating, she and her husband Alex have been busy growing their business.

Lindsay and Alex have two licenses; Browntown Farms in Shubenacadie where they milk 115 head of registered Holsteins in a free-stall and in 2019 purchased another farm, Brownford Holsteins, in neighbouring Milford Station milking 60 head in a tie-stall facility.

"I work in the office and help fill in the gaps around the barnyard (there's always something that needs to get done, or errands to run) and raising our three children, Jack 11, Blake 9 and Harris 6," she added.

When she is not busy, Lindsay enjoys her hobbies.

"When I'm not busy with barn work, I enjoy my hobbies, I definitely have too many and squeeze them in when I can, but I spend an hour in the early morning painting," she said.

Lindsay picked up the hobby in her early 20s working primarily with acrylic, and through word-of-mouth has had the privilege to do some custom paintings – anything from milk cans and cows to pet ornaments for Christmas gifts, anything that pulls on the heart strings.

"I am always so grateful for those who ask me to paint them something near and dear to their heart and any admirers of my work," she added.

The Class of 2023 asked Lindsay to paint something that encompassed soil science, animal science and environmental science. Not an easy task.

"There is lots of symbolism in this piece. What came to mind was the 'little things' are what make the 'big things'; when nurturing that tiny earthworm or providing pollen for the little bee you are nurturing the bigger picture, the earth," she explained.

"Ensuring the foundation of our planet is looked after through research and good stewardship as represented in the painting as bees, earthworms, root systems and soil health, weather, and animals, we are working toward a sustainable, healthy future," she continued.

"The cow represents animal science but also, economics and food production – the cow makes the milk and the dollar. The ear tag is part of the cow, but also symbolic of the role of technology and the due diligence (in this case, cattle traceability) within Canadian agriculture to provide safe products worldwide."

What We Do Matters by Lindsay Brown will hang in the Student Learning Commons and was presented by the Class of 2023 as the class gift to the Faculty of Agriculture.

DASA graduation co-chair Gabby Schenkels and Dr. David Gray unveil *What We Do Matters*, the Class of 2023 gift to the Faculty of Agriculture. *What We Do Matters* was thoughtfully created by Lindsay Brown (Class of '11).



Chelsea Baird

(Class of '07)

Outdoor Classroom and
Landscape Manager,
Dalhousie Agricultural Campus



Born and raised in Tatamagouche, NS, and now raising her two children with her husband in her hometown, Chelsea Baird is happy to return to her alma mater as the outdoor classroom and landscape manager, 15 years after graduating from the environmental horticulture program at NSAC.

Fresh off graduation, Chelsea was hired for the grounds maintenance supervisor position with the Town of New Glasgow, where she was responsible for the overall beautification and horticultural care of the municipality.

After seven years with the Town of New Glasgow, Chelsea then went on to become the town horticulturist with the Town of Amherst. Throughout her years in the municipal horticulture world, she was responsible for anything and everything horticulture-related – from designing annual floral displays, to the management of the municipality's respective urban forests, and the maintenance and care of turf and turf facilities. Her past employment saw her in a managerial role where she was responsible for the training and management of horticulture staff.

Her hobbies and interests include playing sports and watching her kids play sports. Some of her favourites include softball, golf, and hockey, and she enjoys being outside - camping, hiking, travelling and anything beach-related.

As the outdoor classroom and landscape manager at the Faculty of Agriculture, Chelsea supervises the botanical garden and horticultural staff while overseeing the maintenance of outdoor classroom spaces, including orchard, gardens, greenhouses, and living/green walls, as well as managing those who are responsible for coordinating research space in the Demonstration Garden and Plumdale Research Facility.

Q. What is a typical day like for you?

A typical day is spent coordinating and collaborating with others regarding the use of campus gardens and grounds and use of facilities for which I am responsible. I try and take a break from my desk by taking a daily stroll through the Collins greenhouse or throughout the gardens.

Q. How unique and special is it to have a botanical garden in the Village of Bible Hill accessible to our community?

The Village of Bible Hill and our surrounding communities are truly blessed to have such a beautiful and easily accessible botanical garden in their midst. To have this calibre of public garden and green space within a small municipality is incredible. This campus is renowned for its lush beauty of mature trees and gardens, its extensive Rock Garden and more. The Bicentennial Botanical Garden has been a beautiful backdrop and plays host to many prom, wedding, and special family photoshoots.

Q. What is the role of the outdoor classroom?

The outdoor classroom plays an integral role on campus. It offers students the ability to put their acquired education into practical use, in real time. Students can use the campus to help develop practical skills and learn from hands-on experience from the beginning stage to the final stage or in some cases, from seed to harvest. The outdoor classroom is an asset to the Plant, Food, and Environmental Sciences department and the educational experience that students are lucky to gain while attending school here. Our campus offers up opportunities for students from garden design and installation to fruit and vegetable production and everything in between.

Q. How important is horticulture to the overall well-being of our campus, its people, and our community?

Horticulture enriches our lives and promotes human well-being. It sustains and enhances our lives by influencing the quality of the air that we breathe, provides us with nutritious food, encourages a diversity of wildlife habitats, and in addition to its physical and nutritional health benefits, horticulture uniquely provides important mental well-being benefits. Our campus is quite diverse and showcases the many facets of horticulture, from seed to flower/harvest and it is an asset to our students and the community at large.

Q. What is your favourite aspect of the Dalhousie Agricultural Campus?

I feel like it would be odd if I said anything but the gardens. The Alumni Gardens, the Rock Garden, and the mature trees are all my favourite aspects of our campus. We have such a diverse array of plants and trees on campus, and I look forward to working with my team to build upon and help to reinvigorate the gardens and overall landscape of campus for students and visitors alike to enjoy.



Extended Learning

Training you
can **trust**



DALHOUSIE
UNIVERSITY

FACULTY OF
AGRICULTURE
EXTENDED LEARNING



www.dal.ca/exl
extended.learning@dal.ca
902.893.6666



DALHOUSIE
UNIVERSITY

FACULTY OF
AGRICULTURE

dal.ca/agriculture