AGRICOLA

FOR ALUMNI AND FRIENDS OF DALHOUSIE'S FACULTY OF AGRICULTURE

FALL 2022

10 YEARS TOGETHER

Still the same campus everyone knows and loves. It's not just about looking back because it's just the beginning.

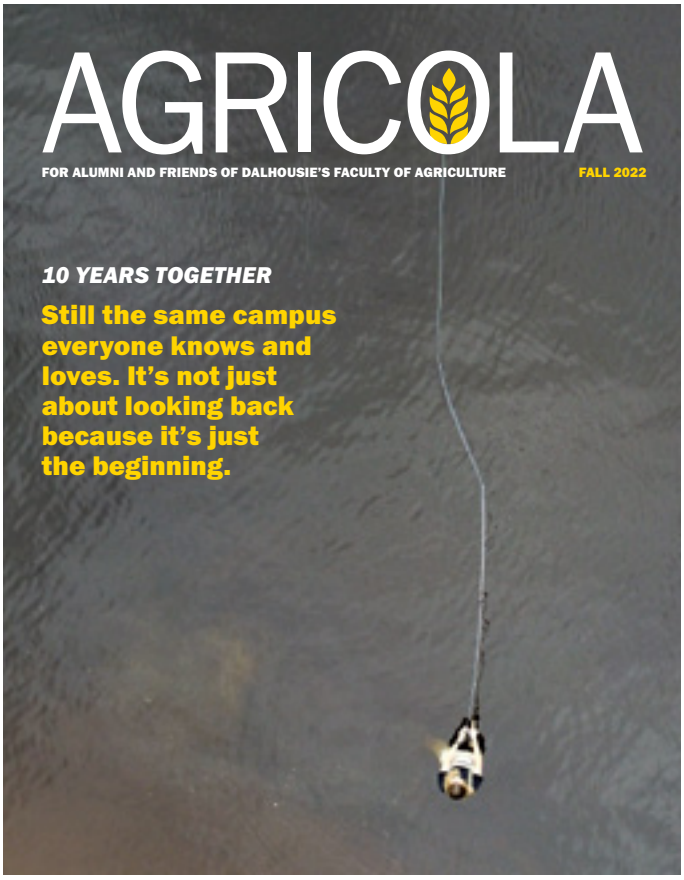
In memory

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.

Charles Cadet	**1950**
Richard (Dick) Haliburton	**1952**
Calvin Tilley	**1954**
James Hawley	**1956**
John Eaton	**1957**
Walter Fiander	**1958**
Grant Colpitts	**1961**
Wayne Davidson	**1962**
Morris Nicholson	**1962**
Charles Canavan	**1964**
J Adams	**1967**
Lewis Pickett	**1967**
Wilfred Grant	**1968**
Lloyd Murphy	**1969**
Brian Dawson	**1972**
Debra Sampson	**1976**
Frank Crouse	**1982**
Nicole Morrison	**1992**
Traci Gowan	**1993**
Kirt MacCormack	**1996**

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**.



COVER PHOTO: Robyn McCallum graduated in 2013 with a BSc (Agr) in Animal Science. Not only was she a part of the first class to graduate from the new Dalhousie University Faculty of Agriculture, but she was also president of the Students' Union at the time of merger. Now, Dr. McCallum spends her days as the president for the Miramichi Salmon Association. In her spare time, she is secretary for the Faculty of Agriculture Alumni Association.

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FACULTY OF AGRICULTURE

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Nick Pearce, Dalhousie University

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FEATURES AND COVERS

EVENTS

AROUND AND ABOUT

Alisha Johnson

Editor, *AGRICOLA*

Manager, Alumni Engagement and Donor Relations, Faculty of Agriculture

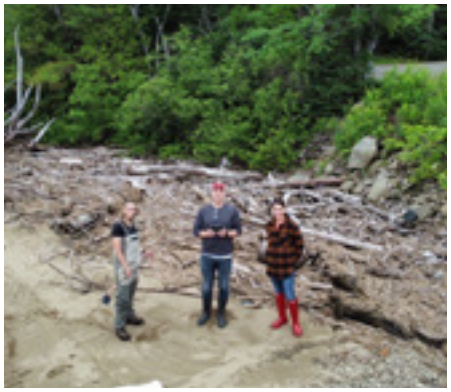
Wow, ten years as Dalhousie University's Faculty of Agriculture. Looking back, I can clearly remember the day staff and faculty gathered in Cox Institute, as the announcement was made, that Nova Scotia Agricultural College would merge with Dalhousie University. I can easily recall the feelings of anxiety, excitement, hesitation and so many questions. What would the future hold? What would that mean for our alumni, students and our special campus?

The future is now, and it has meant so many incredible things for us. The Agricultural Campus is still the same unique, hands-on and special campus you attended. In fact, it's more. And our history has not been forgotten or buried.

When we host our regular Dean's Receptions and engage with alumni, we reminisce, and we can still compare. Student life has changed in some ways, but many traditions remain. Throughout this issue, we've highlighted changes the Faculty of Agriculture has benefitted from, over the last ten years and what's ahead. From construction to academic programs, additional research, and more. It's an exciting time to be connected to the Faculty of Agriculture.

Enjoy a few behind the scenes photos! Dalhousie photographer, Nick Pearce and I spend a lot of time, on the road, visiting alumni for the purpose of Agricola — capturing original photography and interviewing. We truly enjoy touring your operations and seeing first-hand, what you do!

Alisha Johnson | Alisha.johnson@dal.ca | 902.893.6022



Dr. David Gray

Dean, Faculty of Agriculture
Principal, Dalhousie Agricultural Campus

Ten years, a decade...

The decade between September 2012 and September 2022 will always be known as a decade of change, adaptation and compromise as Nova Scotia Agricultural College merged with Dalhousie University and became its 12th faculty.

We gained the resources of a research powerhouse and a place in one of Canada's top-ranked universities. Dalhousie gained a whole new area of expertise and a beautiful new campus community.

Together, we became more than we were before.

Over the past ten years we've developed more opportunities for students. We've added to our programs: Landscape Architecture, Bioveterinary Science and a PhD in Agricultural Sciences.

We've opened a Student Learning Commons. And, as of this year, students can choose to start their Dal Science degree on our close-knit campus that's unmatched in Canada.

We've expanded our partnerships, working with CASE IH to bring in an advanced fleet of tractors and equipment.

And we've risen from literal ashes into new state-of-the-art facilities that support teaching and research. Research that's connecting discoveries with the needs of the community and earning appointments including Canada Research Chairs, a Killam Chair and industry chairs.

Our world view is growing too. It starts right here at home, where we renamed River Road to Sipu Awti acknowledging the resilience of the Indigenous Mi'kmaq people and their language.

And it reaches out around the world. To Ethiopia, where the Faculty of Agriculture led the largest international development project ever awarded to a Canadian university. To China, India, the Philippines and The Netherlands, through collaborations for international learning and career opportunities.

We became more than we were but we're still who we are. Focused on excellence. Providing hands-on learning with active research scientists. Nurturing students in small classes on a friendly campus where they can thrive and create friendships that last beyond graduation.

Ten years together. It's not just about looking back because it's just the beginning.

Dean David Gray | @limpetman

"We want to create a smart farm innovation hub here. We envision the campus as a kind of sandbox—a place where we and our industry partners can explore innovative ideas."

Rendering of the proposed new Digital Agriculture Centre for the Faculty of Agriculture.

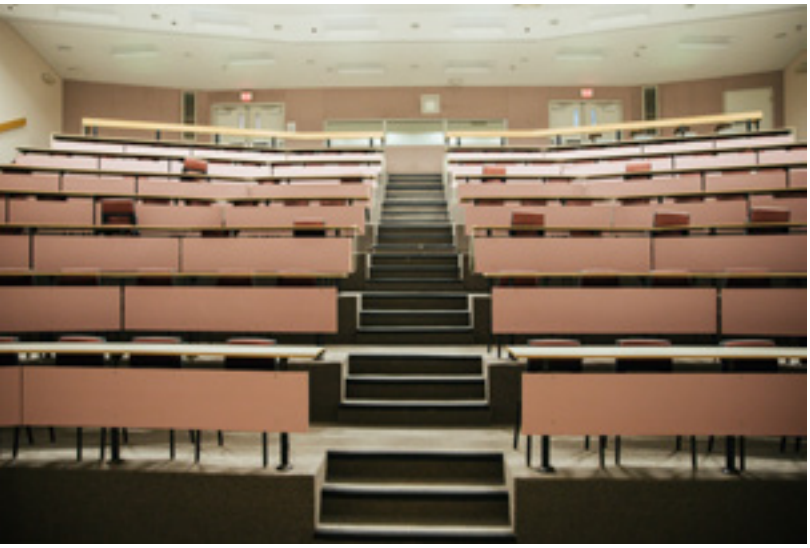
10 years together

When Dr. David Gray became Dalhousie's Dean of Agriculture in 2013, the Agricultural Campus was at a crossroads. Having merged with the university one year prior, there was some question as to how the ensuing relationship would work and how the campus would build on the rich legacy of education and research it created as the Nova Scotia Agricultural College.

Ten years on, the answer is clear. Through initiatives such as the Indigenous Student Access Pathway, the introduction of its PhD program in Agricultural Sciences, and infrastructure investments—most notably the rebuilds following the fires that extensively damaged the Ruminant Animal Centre and Cox Institute—the campus is more diverse, innovative, and academically rigorous.

"Dalhousie really stepped up to the plate and then some to help us make all of that possible," Dr. Gray says. "So much so that I believe we are in a very good place to take the next step as a Faculty."

That next step will be a crucial one for the campus, the agricultural industry, and, to some extent, the world. Climate change is having a significant impact on crop availability, accessibility, and quality, resulting in increased food insecurity both here and globally. It is a challenge that is likely to be exacerbated by continued population growth. Estimates suggest that we will reach the 10 billion population threshold in the next 30 years. More production is required to keep pace with that growth, which raises concerns about the impacts increased activity will have on soil health and access to fresh water—both of which are essential for the agriculture industry, and much of life on the planet.

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Images rendered by Fathom Studio

"The next decade is going to be crucial if we are to successfully address these issues," Dr. Gray says. "Agriculture will play a key role in the solutions we find, and so will our faculty."

There are many reasons to be optimistic about the future of the campus and the impact it can have in addressing these issues and making agriculture more sustainable and robust. For one, the Faculty has added more than 20 new professors since 2017, all of whom are helping to attract more research funding and more students. It also has a strong supporter in Dr. Deep Saini, a world-renowned expert in plant biology who serves as Dalhousie's president and vice-chancellor.

"That's a really big deal for the agricultural community and it exemplifies the calibre of talent we have access to as part of Dalhousie," says Assistant Dean of Advancement, Faculty of Agriculture, Lisa Doucette (Class of '98). "That is a launch pad for us to access more resources to strengthen our infrastructure and get ahead of the curve in terms of the challenges facing the agricultural industry."

There is also increased engagement occurring with other Dalhousie faculties. For example, the Faculty of Agriculture is partnering with the Faculty of Science to launch a first-year program that will enable students from the region to start their Dalhousie journey close to home before completing their studies in Halifax. Plans are also in the works to launch a similar offering for computer science students. Efforts such as these open the door for further collaborations that will benefit students, faculty, growers, and the community, according to Professor and Associate Dean Research, Dr. Chris Cutler.

"We are entering a new era of farming that is focused on production but even more so on strategies and systems, such as which tasks can be handled by smart technologies," he says. "To get there, we need to rethink the way that we conduct research and educate people. This is where our colleagues in computer science and engineering really complement what we're doing here because they can apply the machine learning platforms they are developing to the issues we are exploring. Or we can work with the faculties of medicine and health to see how agriculture can address the chronic health challenges facing our society. That's where the synergy between our Faculty and the rest of Dalhousie has the potential to have huge impact."

Such efforts will also be facilitated by plans for a major undertaking that has the potential to significantly enhance the resilience, sustainability, and yield of growers regionally and around the world: the Digital Agriculture Centre. This proposed $20m state-of-the-art project, which will encompass a new facility, research chairs, scholarships and more, will address a long-standing challenge facing the agriculture industry.

"We are really good at collecting data, but we are not great at assessing it or using it to make strategic management decisions," Lisa says. "Part of that is due to labour shortages that have many growers in survival mode, but it is also due to agriculture becoming increasingly technology driven. From milkers to feeders, there is so much data being generated that it is hard to make sense of it and use it."

This is where the Digital Agriculture Centre can make a difference. More than serving as an accessible central repository for historical and live agricultural data collected from across the region and the campus' own research farm, it is intended to be a value-add for industry. The facility will enable researchers to conduct and deliver analyses of the data it collects to enable growers to be more strategic in their farm management decisions.

"Part of our vision for the centre is to develop a team that bridges the gap between computer science and agriculture," Dr. Gray explains. "We are working with our colleagues in the Faculty of Computer Science on joint appointments so that we have experts in place who have the capacity to analyze the data on behalf of the campus and our industry partners and then deliver insights that can be applied in beneficial ways."

At the same time, the Digital Agriculture Centre will bridge another gap: the availability of research and analysis that is directly applicable to Atlantic Canada's unique farming model, which predominately consists of small operations with multiple

commodities. That same model is also predominant in emerging markets such as India, which creates opportunities for the Digital Agriculture Centre, and the campus, to export crop management analysis and expertise.

"Although there are other universities across Canada that have similar initiatives, their work involves 10,000-acre wheat farms or huge dairy cattle farms, so their findings don't always translate here," says Lisa. "For that reason, the research we do will be critical for our growers and for countries where they use similar models. The key is to get producers to use it, which is why the Digital Agriculture Centre will be industry focused—supporting research that is based on challenges that affect the industry or new technologies that have the potential to enhance operations."

There are many ways the Digital Agriculture Centre could deliver on that commitment to producing relevant insights. An assessment of cattle feed options that identifies the most effective and cost-efficient choice for dairy farmers to increase milk production. An analysis of climate and adverse weather conditions for blueberry farms participating in Nova Scotia's Weather Station Assistance Program. Explorations of opportunities to extend our growing season and improve land use efficiency. Or a validation of technologies such as smart sprayers that selectively apply herbicides or sensors that determine the nitrogen levels in leaves. All of these would be impactful, but Dr. Cutler indicates the Digital Agriculture Centre is just a stating point for an overarching vision of evolution for the Faculty.

"We want to create a smart farm innovation hub here," he says. "We envision the campus as a kind of sandbox—a place where we and our industry partners can explore innovative ideas. Through data capture, management, and analysis we will enable everything from better technology development to better predictability for farming systems. By focusing on areas such as precision agriculture and machine learning, we will continue attracting academic talent that further bolsters our reputation and attractiveness among students and generates more funding for research."

More funding, more research, and more academic talent—the Digital Agriculture Centre has the potential to make all this possible in ways that would be transformational for the agriculture industry. But it will also be transformative for the students who will eventually enter, or collaborate with, the field. "We have undergraduates coming to our campus who have very little exposure to digital agriculture," Dr. Gray says. "As they progress toward a degree, they will gain specialized knowledge that will prepare them for honours, graduate, or postdoctoral research. Essentially, our learning environment will become a circle where our researchers and their activities inform our undergraduate programs, advancing both the learning experience we offer and the research we are able to conduct here."

The way forward is clear. The first step is a big and necessary one. Dr. Gray believes the Digital Agriculture Centre will be embraced and supported by alumni, industry, and the community alike. Not just because Dalhousie is committed to realizing it but also the fact that it could make a huge difference in helping to hold climate change in check and feeding the world.

"I am an optimist, naturally, but I think the stars are aligning for us," he says. "All of Dalhousie is supportive, from the president who understands the importance of agriculture in addressing the challenges we face as a society to the interest among other faculties in working with us. That creates a solid foundation for conducting applied research that will support our industry in being stronger and more competitive not just within Canada and North America, but across the globe."

Now fully retired and enjoying every day, Dr. Harold Cook enjoys gardening at his property, along with wife, Helen.

Leadership through merger

Dr. Harold Cook (Class of '66)

Dean of the Faculty of Agriculture and Principal of the Dalhousie Agricultural Campus 2012-2013

A decade after leading the formation of Dalhousie University's Faculty of Agriculture, Dr. Harold Cook reflects on the monumental transition.

When Dalhousie University's then president, Dr. Tom Traves, needed someone to lead the merger of Nova Scotia Agricultural College (NSAC), he knew the perfect candidate. Dr. Harold Cook had been dean of Dalhousie University's Faculty of Medicine for six years and had started his academic career fresh out of high school at NSAC back in 1964. "President Traves wanted someone who could relate to the situation, and who the faculty and alumni could identify with and trust," Dr. Cook says.

The challenges of change

Dr. Cook had no reservations about the merger. "I'd known two decades earlier that this was something that needed to happen. The students immediately saw it as a plus to be associated with a larger university, and most of the faculty did too," he recalls, "There were, however, many grads who were not on board. We had a reasonable expectation from the start that it was not going to be easy to convince them that this was what's needed in today's world."

Dr. Cook saw developing trust with alumni as an important part of his role as dean. “It was a matter of communication, communication, communication, and showing them the pluses."

Dr. Cook still connects with his former classmates regularly, and says that until recently he was still reprimanded with cries of “What have you done?” Dr. Cook smiles as he recalls saying, 'Come on folks, it's been 55 years; the merger doesn’t lessen any memories or feelings about what was there in 1966.'

One alum who gave Dr. Cook a particularly hard time was his good friend and former premier of Nova Scotia, the late Donald Cameron. “I remember visiting him in his office when he was premier and he said we've got to do something about all these colleges and universities in Nova Scotia, there are too many,” Dr. Cook recalls, “I reminded him of what he said when he opposed the merger, but when it came down to it, the strong connection to his student days so precious to him was what he wanted to preserve.”

Dr. Cook saw developing trust with alumni as an important part of his role as dean. “It was a matter of communication, communication, communication, and showing them the pluses. I think a key turning point in making this palatable was being able to say “Dal AC”, which showed that we didn't completely lose that component of the college. There was recognition in the name,” Dr. Cook says.

Looking back, Dr. Cook says it ended up being a fairly smooth transition. “The campus has held together,” he says, “I’m proud of how with both the changes in administration and academic programming, the AC is still solid and vitally important to world and provincial needs.”

Growing into the Faculty of Agriculture

Much has changed since Dr. Cook and his fellow alumni arrived at the NSAC as eager young learners, and he has enjoyed seeing the programming grow to reflect the broader scope of what agriculture means today. “It's much more farm-to-fork, and there are many side pieces to that such as aquaculture and environmental concerns,” Dr. Cook says. “Moving into the future I see the scope evolving to bring in even more, weighing the pluses and minuses of each of these things to make them more efficient and more protective of both the natural resources that we have and those that we will exploit in the future.”

To young people considering a career in agriculture, Dr. Cook says the opportunities are immense. “There are many branches to food production and distribution and processing and overall management. Young people today are so in tune with the environmental impacts and implications of farming, and at the heart of knowing that we have to do it right,” he says. The Faculty of Agriculture has grown to keep pace with these changes and, thanks to deeply caring faculty and alumni like Dr. Cook, will continue to be at the forefront of agricultural education and research for many more decades to come.

Going forward, Dr. Cook will be dedicating all his time to retirement. Sort of. In his 10-year tenure serving on the board of the Yarmouth Hospital Foundation, Dr. Cook helped raise donations to the hospital significantly and guided the Foundation through national accreditation.

“When I started at the Foundation, our annual contributions to equipment and programs at the hospital were less than $500,000; within a year or two they were at $750,000, and then last year they were up to $1.5 million and this year are at $3 million. It makes a big impact on this regional 125-bed hospital,” Dr. Cook explains, adding that he also serves on two committees related to rural physician recruitment. When you’ve spent a life making an impact, it would be a shame to let your hard-earned skills retire even if officially — you have.

Faculty of Agriculture Facilities Planner, Stephanie MacKenzie has witnessed and had an impact on many changes to campus, since she was a student.

Highlights from the last 10 years

Infrastructure investments

Every time Stephanie MacKenzie (Class of '04) steps foot on the Agricultural Campus, she is immediately struck by how much has changed since the first time she passed through its doors as a student more than 20 years ago.

"It felt like another version of high school," recalls Stephanie. "Now, it feels more like a university. It's hard to believe we have something like this in Truro because we are a relatively small town."

In the decade since it merged with Dalhousie, the campus has undergone some major upgrades, bringing its facilities—some of which date back to the 1960s—boldly into the 21st century. Classrooms have been rethought and reconfigured, roads have been paved, and roofs and windows have been replaced to enhance comfort and energy efficiency. It's been a remarkable transformation in some regards, and Stephanie has played a vital role in it over the past five years, first as a facilities renewal project manager and now as a planner.

"It is very rewarding work," she says. "It helps that I have been here for a long time because I know what needs to be addressed but I also know a lot of people on campus, which creates opportunities for conversations about changes we need to make."

Change has been a constant for the campus since its merger with Dalhousie in 2012—a merger that helped make investments and enhancements possible. "As a campus we were carrying a lot of deferred maintenance, which is typical of universities because it is expensive and the money is not necessarily there to keep up," says Dr. David Gray, Dean of Agriculture. "Over the past 10 years, Dalhousie has worked through that list. There is not a place on campus you could point to that has not been renovated and upgraded in some way."

Those upgrades, he notes, have gone beyond maintenance requirements into the realm of bold ideas that have energized the campus as an academic institution and community. He cites the Student Learning Commons as an embodiment of this evolution. "We have a very proud, close-knit student community that has never really had a dedicated space to gather on campus," he says. "We renovated the top floor of the library to establish the commons. In doing so, we not only created new offices for the student association, which had been in the basement of the Cox Institute, but also offered students a welcoming place with resources such as a self-serve café. It has been a fantastic addition to our campus."

Another major addition that comes to mind is the biomass generation plant, which is using woodchips from the forestry industry to generate heat for the entire campus. "The plant helped resolve one of the biggest challenges facing the industry: what to do with the waste they generate," Dr. Gray says. "Now, they have a guaranteed outlet for their waste which is enabling the industry to grow."

Equally important, it has enabled the campus to make significant progress in its goal to be carbon neutral, a commitment that Dr. Gray says is challenging for agriculture. "We are using an electrostatic filter in the plant that has made it possible for us to reduce emissions to less than our previous oil-fired equipment. The plant's generator simultaneously produces green electricity and enough thermal energy for the campus' needs and we are able to sell electricity back to the Nova Scotia Power grid. That means the whole community benefits from this clean, sustainable energy source."

For Stephanie, there have been several notable upgrades to campus infrastructure in recent years. They include a $2 million effort to improve the grounds, such as paving and sidewalk construction, and more than $3 million invested to upgrade residence rooms with new electrical, lighting, flooring, paint, and furniture along with renewed roofs and windows in some buildings. She is also excited about the refresh of Jenkins Hall that not only enables it to accommodate events such as weddings but also the nutritional needs of the campus' students.

"We created an area called *My Pantry*, which is a fully equipped kitchen," she says. "It enables our students to prepare the kind of meals that they are used to having, so that is a great addition for us. Little touches like that make a real difference. But most of our investments since the merger have focused on enhancing building envelope elements such as windows and doors as they most needed attention."

With these needs addressed, Stephanie and the campus are turning their attention to other upgrades. Some will occur behind the scenes, such as enhancements of the campus' mechanical and electrical systems to keep them operating smoothly and achieve energy savings. Others will be more obvious, such as refurbished washrooms. And some will result in improved safety, such as new fire alarm panels that enable easier identification of triggered alarms. But it is plans for smart farm investments—the new Digital Agricultural Centre and the Precision Animal Management Centre—that point the way forward for the campus. They will create a learning and research environment that addresses the challenges facing the industry and sets standards for other institutions to follow. A combination of community support and progress made on campus upgrades will help make that smart farm vision possible.

"All of our maintenance is under control and there are a significant number of campuses across the country that cannot quite claim that," Dr. Gray says. "Overall, I think we are in a good place and ready to start investing in the agricultural campus of the future."

More than $3 million has been invested to upgrade residence rooms including interior upgrades, renewed roofs and windows.

In late summer, crews were putting the finishing touches on a new parking area by Langille Athletic Centre. The parking area is now open and is much more efficient.

$2 million has been invested to improve the grounds, on the Agricultural Campus, including paving and sidewalk construction.

In the last decade over $30,000,000 has been invested in sustainability projects (including energy) by Dalhousie and partners.

Projects range from full campus systems upgrades to cross-cutting measures. *Examples include:*

- Complete upgrade to the district energy systems and central heating plant from steam to hot water and to co-generation (winner of the International District Energy Association Innovation Award – 2022)
- Full campus lighting and high efficiency pumping upgrades
- House heating system changes from oil to heat pumps
- Enhanced utility metering and energy management information systems
- More efficient fridge/freezer, kitchen and lab equipment upgrades
- Increasing biodiversity and flood management though tree and garden plantings
- Installation of bike racks and standardization and addition of waste management bins

Moving into the next decade, plans are underway to roll out a green labs program, explore options for using waste heat for cooling, lab equipment upgrades, building recommissioning, green building – net zero standards for new construction, solar installations, and biodiversity planting.

Agricultural transformation through stronger vocational education

Eight years later

One of the largest international development projects ever awarded to a Canadian university has come to an end after eight years of transformative work in sub-Sahara Africa.

The Agricultural Transformation Through Stronger Vocational Education (ATTSVE) project has helped to evolve Ethiopia's agricultural practices and education beyond its subsistence-based foundation towards a market-focused system.

"Experts from Dalhousie University's Faculty of Agriculture have helped Ethiopia reshape its agricultural education, improving production, strengthening communities, and helping the country not just survive, but thrive in the 21st century global food economy, recognizing that education was the key to initiating change," explained Dr. David Gray. "Projects like this bring us together to face our challenges together. Agriculture is a global industry, and we are a global community."

The goal of this more than $20 million project was to increase the supply of male and female graduates from four agricultural colleges with the skills and knowledge required by the labour market to develop the commercial agriculture sector in Ethiopia.

"The ATTSVE project has been selected by Global Affairs Canada as an example of gender transformative approaches among initiatives in Ethiopia," said ATTSVE Project Coordinator, Hannah Pugh. "We are proud of the work of female and male staff at the colleges to create environments where female students and staff can excel and feel safe and supported. Leadership roles among women have increased from 25 per cent to 50 per cent which is very impressive," added Hannah.

Other successes included:

- Increasing the capacity of Agricultural Technical and Vocational Education Training (ATVET) institutes to deliver high quality education. Through the work of Dalhousie and project partner staff completing 21 assessments, developing lists and procuring and transporting over $4M of equipment and facility upgrades, all four target communities are benefitting from access to improved facilities on their ATVET campuses provided by the ATTSVE project; infrastructure allowing consistent access to the internet allows connection with the wider world, and smart classrooms are being used to enrich community events, not just for the benefit of ATVET students and staff.
- Innovative management strategies allowing colleges to lead education in Ethiopia. Through nine training sessions delivered to over 150 staff on the agricultural campuses, ATTSVE has significantly improved the ability of the ATVET Colleges to design and implement gender inclusive and sustainable management strategies leading to an improved management structure which allows the better delivery of high-quality education.
- Increasing the capacity of Agricultural Technical and Vocational Education Training institute instructors to teach effectively. The project provided 1901 hours across 53 trainings and workshops over eight years to 1552 ATVET instructors and staff across Ethiopia. This includes participants from all 16 ATVET colleges in Ethiopia, not just the four that ATTSVE focuses on.
- New agriculture curricula being used across Ethiopia After conducting detailed labour market assessments and leading a team of 58 Ethiopian ministry representatives, agricultural experts, and project partners through 450 hours of curriculum development processes, this curriculum was approved in 2017; it is now being used in almost every ATVET in Ethiopia, by over 15,000 students each year.
- Direct support to local smallholder farmers. The project is providing direct support to farmers and local communities through the development of skills-based short courses using modules from the curriculum development.
- Effective partnerships between public and private sectors One area that has really transformed thanks to ATTSVE is the provision of cooperative placements to over 1500 agricultural students, across the four colleges. These private sector placements have significantly increased the employability of ATVET graduates as the benefits of practical training in a real employer environment cannot be ignored.
- New agricultural businesses ATTSVE has supported over 400 graduating students to develop their own agricultural businesses in a range of industries including poultry, cooking oil production, juice processing and dairy.
- Holistic capacity building approach. The significant project impacts can be reflected by Nejo ATVET being promoted to a Polytechnic college in 2021, Wolaita Soddo becoming a centre of excellence in middle level education, and Woreta hosting a campus and delivering degree programs for Debradator University.

Future Impact

As well as serving as an impressive example from a suite of agriculture and food security projects the Faculty of Agriculture has been delivering for 37 years all over the world, one of the greatest impacts of ATTSVE has been its legacy in other East African countries.

Hearing about ATTSVE, the Ugandan government approached the World Bank for support for a similar project, which was awarded to the Faculty of Agriculture in 2017. Successful methods employed in ATTSVE are now being delivered at the Bukalasa Agricultural College -the only state Agriculture college in Uganda- to its 1000 students.

"It is having a huge impact on agriculture education, entrepreneurship and improved farming practices all over Uganda," said Dr. Miriam Gordon, assistant dean International. "The hope is that, with the support of Global Affairs Canada and other funders, we can continue the ATTSVE legacy of support to the international agricultural sector and ensure food security for many through innovative education and community support"

In future generations the legacy of the ATTSVE project will lead to better harvests and greater food security, reducing the need for food imports and ensuring that Ethiopia is self reliant and resilient to its future challenges.

This project was funded by Global Affairs Canada through the bilateral program, led by Dalhousie University, in collaboration with implementing partners McGill University, Jimma University College of Agriculture and Veterinary Medicine and Mennonite Economic Development Associates of Canada.

The project commenced in March 2014 and was completed in June 2022.

Biomass plant generates international accolades

Dalhousie fired up its revamped biomass plant in Truro for the first time a few years ago touting a lofty goal for a 30 per cent jump in energy efficiency. Turns out, the facility's planners could've been even more ambitious when setting their targets.

"On average, we are producing energy somewhere between 10-15 per cent above what was expected in our business case," says Darrell Boutilier, director of operations with Facilities Management at Dal and a key planner on the project.

That's enough power to satisfy nearly 75 per cent of all the Truro campus' electricity needs, an achievement that recently landed Dalhousie and its consulting partner FVB Energy a coveted global award for innovation from the International District Energy Association (IDEA).

"This has not been shown before on this kind of scale," said Bob Smith, chairman for the IDEA Innovation Award committee, in a statement recognizing the accomplishment in June.

Dal's facility does not directly power the campus. Instead, the electricity generated by the plant feeds into the province's power grid, which Dal then buys back at a lower rate as part of an agreement with the province.

A leap forward

While the Truro campus first embraced its role using biomass more than 30 years ago (when it was still known as the Nova Scotia Agricultural College), the new system represents a significant leap forward for alternative energy at Dal.

At the heart of this success lies a sophisticated bit of technology called an organic rankine cycle turbine. Dal adopted the new system on FVB Energy's recommendation, becoming the first university in North America to deploy such technology.

When coupled with other plant upgrades, the new system provides other advantages as well.

For starters, the university now supplies all its campus heating needs in Truro using residual heat generated from the plant's electricity production — an accomplishment made possible through replacing an aging steam-powered network with more efficient water-based heating.

The renewed facility also produces far fewer emissions now with enhanced air-quality technology, and the ash produced from the fuel — combusting waste sawmill residue — during operation finds new life as fertilizer delivered to nearby farms.

Dal's retrofit of the biomass facility began around 2015 after the university was accepted into Nova Scotia's COMFIT program, which is designed to boost the proportion of the province's energy production coming from renewable sources. District energy providers — large facilities like universities that sell power supply back to surrounding communities — receive special rates as part of the program.

"This project supports many objectives," says Boutilier. "One, from an alternative energy standpoint, but also from a financial sustainability standpoint."

All this made the facility a great candidate for the Innovation Award, which recognizes projects that showcase technology, engineering and operational innovation within the district energy sector — weighing their ingenuity, measurable success over time, replicable design that can be applied elsewhere, and economic and environmental benefits.

Powering up performance

Kevin Craig, chief engineer at the biomass facility for Facilities Management and a 30-year veteran of the plant, says the renewed system offers a lot more technical control over energy production.

He has worked closely with plant operators over the past few years to help tweak the system to squeeze even better performance out of it.

"I've always believed in the idea of never be satisfied with your level of output," he says. "You'll never reach perfection, but you're always trying to improve things."

Craig joined other Dalhousie team members and staff of the FVB Energy team to accept the Innovation award at the IDEA conference in Toronto in June.

"I was caught off guard a little bit," he says when he learned of the award. "As I kept telling people during the conference, it's a team effort. We all work together."

Group caption (top): Members of the Dalhousie and FVB Energy teams accept the Innovation award at the IDEA conference in Toronto in June.
Below: David Gray, dean of the Faculty of Agriculture (in red), takes part in a tour of the renovated plant in 2018.

"On average, we are producing energy somewhere between 10-15 per cent above what was expected in our business case."


STUDENT LEARNING COMMONS
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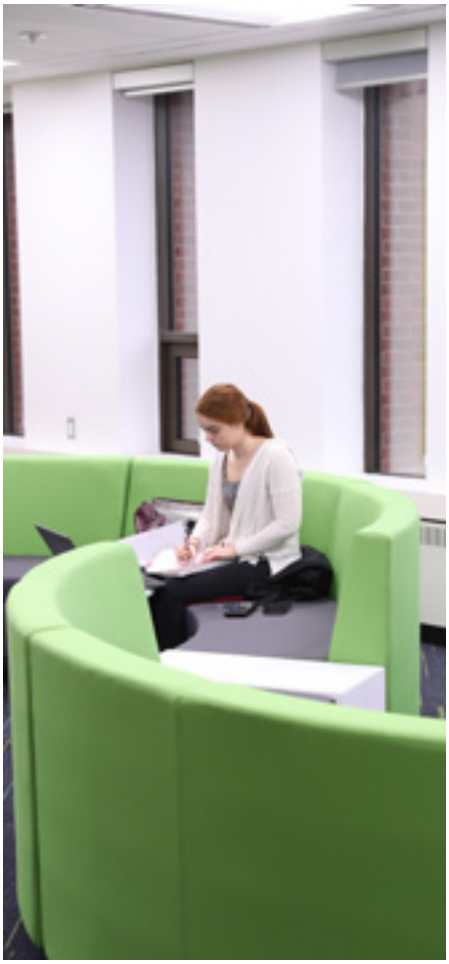


collaboration
lounge

Build it and they will come

Student Learning Commons fulfills purpose

Four years after the new Student Learning Commons (SLC) was officially opened in September 2018, it has become the heart of campus, more than fulfilling its purpose as a place for relaxing, studying, socializing, and accommodating the many varying needs of Dalhousie Agricultural Campus students.

Its completion was serendipitous after a significant fire had just destroyed the East Wing of Cox Institute in June of that same year. The large Program Rooms immediately met the needs of students for temporary classroom space for the subsequent two years and functioned perfectly for this unintended purpose.

"We could not be more pleased with the response from students, staff, and faculty to this new space," Association Dean Library Services and Head, MacRae Library, Elaine MacInnes. "Students have really embraced the SLC, and we love the energy that comes with all the various student-focused events that we are able to host in the space."

The SLC, located on the top floor of the MacRae Library, is a mix of open spaces with a modern yet cozy atmosphere. Soft seating for reading, tables for working and bookable study rooms of varying sizes allow students to gather, relax, learn collaboratively, and socialize. Bold colors stimulate creativity while flexible furniture is fresh and bright. The large windows allow natural lighting, and a 14-foot living wall purifies the air and welcomes visitors as they enter. An original mural, designed by Art Stevens, marking the history of the Mi'kmaq has a large presence in the SLC and acknowledges the campus' student diversity.

The Indigenous Student Collective lost their initial space in East Cox and has made great use of the new space in the CIBC Multicultural Centre for smudging, Awtiket summer camps, and as gathering space.

"Our Indigenous students really feel at home in the SLC," said Manager of Indigenous Students , Keah Gloade. "We often use this space for campus events and to host various special events, including orange shirt day. Our displays for these special events are often showcased by the wonderful staff and seeing that representation makes our Indigenous students very prideful. We have started an Indigenous Mentorship program with Sunday evening study meetings and the students have suggested using the SLC because of the high level of comfort they have in this space."

The bookable meeting rooms and event spaces are in heavy demand - from thesis defences, career fairs, exam accommodations and even as a pre-event space for summer Convocation this past July, the SLC has become a gathering space on campus for the entire community.

"A university experience is far more than what happens in the classroom or laboratory – it's getting to meet and work with people from different backgrounds, cultures and countries," explained Dean David Gray. "Our fantastic Student Learning Commons space was designed to facilitate and nurture student collaboration, and feedback shows it is truly appreciated by students and staff alike."

The Dalhousie Agricultural Students' Association (DASA) offices draw students in for society meetings, Meet the Dean events and more. Faculty members mingle with students and grab a snack on their way to meetings and classes.

"Since merging with Dal, DASA has been provided with a beautiful new space in the Student Learning Commons, said Allyson Briggs, its 2022-23 president. "This space not only provides our executives an area to fulfill their day-to-day tasks, but also an area for students to relax and spend time with their fellow aggies. The DASA lounge is a safe space where students can go to seek answers with respect to anything happening on campus, buy tickets for 'The Barn', or even catch one of our 'Meet the Dean' events," she added.

Large Program Rooms, which students can book, include integrated audio-visual systems. A Quiet Room and The National Centre for Truth and Reconciliation Hub are also located in the CIBC Multicultural Centre within the SLC. In the washroom adjacent to the Multicultural Centre there is an ablution station for ritual purification before prayer.

Every inch of the 14,000 square feet of space has been utilized including the lobby which has now become bookable space for fairs, sales, and external bookings throughout the summer months.

Warrior on the Hill

Lorne Alexander Julien is a proud Mi'kmaw artist and member of Millbrook First Nation, Nova Scotia. He recently completed two murals on the Agricultural Campus in Cox Institute – one in the new Indigenous Student Space in East Cox and most recently one in the entrance of West Cox.

Julien is a self-taught artist specializing in rich vibrant colours. He creates murals in schools, institutions, and public spaces to Indigenize and create safe spaces that are inclusive, respectful and honour Canada's Indigenous People. He believes incorporating Indigenous art in public spaces is a simple act of reconciliation and moving forward in a spirit of mutual respect and understanding.

"The painting reminds us to honour the cycles and respect all the elements when we work with the land," explained Julien.

"The centre of the mural shows the medicine wheel, representing the four colours, the four seasons, the four directions. There are many teachings in the medicine wheel," said Julien. "It can also represent the circle of life."

"The whale (putup) represents water and all the water cycles and the life that depends on the water. The tree is connected to the earth and the air. We breath in what the trees breathe out and vice versa, that is how we survive," he added.

"The eagle (kitpu) is an important element in my paintings, they are protectors and represent love. The hummingbird (militaw) symbolizes beauty, joy, and playfulness. The moose spirit (tiam) coming into the mural from the side is a woodland creature, tiam stands for protecting habitats and the need to share the earth in a good and respectful way."

Lorne's Mi'kmaw name is 'Warrior on the Hill' (Sma'knis) which was given to him in his youth when he learned about the spiritual way of his people. His artwork is a form of prayer, providing healing for himself and to the world. His intention is to inspire hope and balance within the universe.

These two murals are a small step in a much bigger plan to help Indigenize the Agricultural Campus to be a welcoming and inclusive space for all learners and one in which indigenous students can see their community honoured and reflected.

"The Indigenous Student Space in East Cox is always being used by students and their allies, often for the meeting of the Indigenous Student Collective and a place to host Indigenous events" explained Keah Gloade, manager of Indigenous students.

One of the features students take great pride in, is the mural in this space.

"It has important meaning with colours reflecting residential schools, animal symbolism for the concept of love and family as well as representing the four pillars of the medicine wheel," she added. "I'm so proud to have such a meaningful space on campus feel complete with the addition of the mural for our Indigenous students. I'm excited for the students to see the addition of our newest mural in West Cox, they will feel valued and appreciated in their Indigeneity on campus – which is reconciliation in action."

Keah works to help foster Aboriginal student success by providing specialized advising and support. Additionally, she serves to assist faculty and staff to create a welcoming and inclusive campus environment.

This includes working to Indigenize the curriculum of several first-year courses as well as select second year courses. The Faculty of Agriculture is also developing a series of co-curricular activities on campus with an aim of increasing Indigenous cultural awareness and inclusivity. The incorporation of Indigenous perspectives and ways of knowing in curriculum, policy and on campus landscapes will ensure administrators, faculty and staff have a broader understanding of Aboriginal culture, values, traditions, and customs.

The Indigenous Student space also provides a second space for smudging.

"It makes our room so inviting, its nice to have visual representation of our values," said Kylie Harquail Simonson, President of the Indigenous Student Collective. "No matter where we are, we are connected."

The Indigenous Student Access Pathway (ISAP) has also been designed and delivered as a one-year program exclusively for First Nations, Metis and Inuit students who would not otherwise be eligible for admissions and who would benefit from dedicated supports while transitioning to a university environment.

Throughout the student experience there will be opportunities for community involvement, access to Dalhousie's Elders in Residence program and more. By immersing students in a strong and supportive network of faculty, staff, and peers the ISAP aims to provide both the tools for navigating post-secondary and a culturally supportive environment needed to succeed.

The Agricultural Campus is uniquely situated among 13 First Nations communities and in 2016 permanently installed the Mi'kmaq Grand Council Flag- a first for a Nova Scotia university - acknowledging the campus sits on Traditional Territory of the indigenous Mi'kmaq people

"Our campus is a place of learning for everyone, no matter their background, culture, gender or sexual orientation," said Dean David Gray. "It is crucially important that members of our Indigenous communities see themselves here as part of our community and feel welcomed. It is also important, as a place of learning, that we embrace the knowledge of our indigenous elders and share with all."

For those who have a vested interest in a university experience and in particular a science experience, are also offered an opportunity to spend a weekend on the Agricultural Campus.

Awtiket Summer Camps, meaning 'clearing a path' are offered to Indigenous students aged 12 – 16 years of age over a weekend to immerse them in university life. Students attend classes, stay in residence and experience extra-curricular activities.

Where are they now?

The Class of ’13 was the first group of students to graduate from the new Dalhousie University Faculty of Agriculture. These students began their studies with Nova Scotia Agricultural College, continued their classes and experienced life on campus through the time of merger. For many, this was a time of unease, question, anxiety, but also excitement. In keeping with the theme, 10 years together, we decided to check in with a number of alumni from the Class of ’13 to see where they are now and how they felt about NSAC merging with Dalhousie University.

Amanda Levy

Amanda Levy appreciates agriculture, much like the rest of us. It's important to her because she says it's a big part of how she ended up where she is today.

"My father was instrumental in my exposure to farming having raised (and still raises) varying farm animals and crops," says Amanda. "Living on a farm (in Pictou, NS) meant that one of my first jobs was packing hay bales onto trucks and into barns, which then led to sitting on the back of a blueberry harvester for the neighbours farm and mowing the local cemetery."

Agriculture is what formed Amanda's early years of work ethic.

"For that, I am forever grateful."

After earning her degree in plant science, Amanda went on to further her education at Niagara College, in Ontario, completing the Wine and Viticulture Technician program. As an intern, and graduate, she worked at multiple vineyards in NS and Ontario.

Amanda admits she doesn't think she pursued her career path, but rather the career path pursued her.

Perhaps that's just why she ended up as a residence services supervisor for Campus Living Centres (CLC) at Niagara College. Amanda currently spends her days managing a service team, overseeing the administration practices of the Welland residence for Niagara College, working primary with student residents, during the academic year and as a hotel alternative, during the summer season. And it's not all that different from working at vineyards.

"The jump from working in wineries, to CLC, was a short one as retail customer service is as integral to the wine industry as the agricultural portion is," she adds.

Nor was this something new for Amanda.

"While at AC, I worked as a residence assistant in Fraser House," she adds. Amanda also held a part-time role at CLC, as a student at Niagara College.

"I often use the skills I learned from creating literature reviews, research projects and experiments towards the navigation and implementation of projects in the service industry," she adds. "This is truly a job where I learn something new everyday, and it keeps me on my toes!"

When the announcement was made, that NSAC would merge with Dalhousie University, becoming the Faculty of Agriculture, what were your initial thoughts and feelings? Looking back, how do you feel now?

I remember my initial thoughts were based in sadness. The NSAC and the culture around our campus felt so wholly unique and personal. It felt unimaginable that we were going to be connected with such a large institution like Dalhousie. I think it was easy to be defensive over all the information and changes swirling about.

I can't believe I felt like I did! I do feel being attached to the Dalhousie name brings benefits to the campus and has also allowed students from the AC more opportunities beyond the smaller scope of our campus. I also feel that even though our name is officially Dalhousie Faculty of Agriculture, that "the AC" still stands as it's own understood colloquialism.

How has the campus changed in the last 10 years?

Has it really been 10 years? I visit almost once a year and although there are changes to the people, the buildings and the landscaping over time, it still feels like a place where everyone feels welcome to come back to. And I know over the years, even when my sister attended (Rycha Levy – Class of '20) that the same stories still surface that were told to me back in the day and it's something that we can now relate with even though we are a generation apart.

What is your favourite memory from your time at NSAC?

I have so many memories from the AC, from meeting forever friends (not everyone can say they're still friends with their first roommate) to working on campus, traveling and learning valuable lessons.

One lesson in particular tends to stick out. In my first year, I admittedly didn't do so well on my math entrance exam. This gentleman was walking by and saw me, a crying first year on a bench, outside of Cox and sat down to talk. He told me that showing up and trying was better than doing nothing at all.

The gentleman that sat down and provided that piece of wisdom was none other than Dr. Olson my soon-to-be first-year biology professor. It may sound simple but to me at the time, it was those words that helped me get over those feelings of failure and to keep going.

Alex MacDonald

Growing up on a dairy farm in Crapaud, PEI, Alex MacDonald wasn't the typical farm kid.

"I wasn't involved in 4-H and instead, spent all of my free time on a dirt bike, or fishing," he recalls.

As his high school days drew to a close, he didn't know what he wanted to do for a career, or if he wanted to be involved in agriculture, at all. The same year, Alex's family suffered a barn fire, losing their dairy barn, all of their milking cows and calves.

"My father was 50 years old, at the time," says Alex. "He wasn't really sure whether he was ready to rebuild or go in a different direction."

Meanwhile, with some help and advice from family, Alex headed to NSAC to study aquaculture and plant science, earning his degree, at the time of merger.

Alex's dad had made his decision not to rebuild the family farm but wasn't ready to leave the industry. He entered a partnership with friends, in a nearby community, who were undertaking a large expansion.

With his new degree, Alex headed further away from home, where he spent time working in BC. After the stint in aquaculture, he decided he wanted to dabble in his roots, gaining some different experience in agriculture, after all.

"I had a chance to work on two dairy farms, a potato farm, a Christmas tree operation and an agri-chemical research farm," says Alex, of his well-rounded experience, all at good timing. "My father's partnership was coming to an end and a decision had to be made on the farm."

Together, Alex and his dad decided to build, re-entering the dairy industry, on their home farm and the world they knew. They built a barn and started shipping milk from home again in the spring of 2017.

"Although I may not have appreciated it growing-up, agriculture is so important and has allowed me to return home and make a living in my hometown. I am inspired by my hardworking parents and everyone who is working in the industry."

Reflecting, Alex is pleased of his experience elsewhere, but couldn't be more proud of where he is today – Highlander Farm with his family.

"It's challenging," he admits, "trying to earn a profit with rising costs. We recently had our year end review, and we are headed in the right direction."

When the announcement was made, that NSAC would merge with Dalhousie University, becoming the Faculty of Agriculture, what were your initial thoughts and feelings? Looking back, how do you feel now?

At the time, I think we were worried about what the merger would mean and what would change. But as students (and looking back), it didn't change much for me. Certainly better than the campus closing!

What is your favourite memory from your time at NSAC?

Like many people say, I have lots of great memories from my time spent on campus. Hands-on work like in the greenhouse and raising fish in Haley stand out and pretty unique to the AC experience. I also have lots of great memories from Farmers Olympics and of course, pub nights at the Barn.

Katherine Mitchell

Growing up around animals, on her parent's beef farm in Village Green, PEI, her future was always clear. She would make her career around animals.

And Dr. Kathrine Mitchell has done just that.

Katherine graduated with her B.Sc., majoring in animal science, with a minor in animal welfare, as part of the first group to graduate as the new Dalhousie University Faculty of Agriculture, in 2013. Katherine then went on to pursue her dream as she was accepted to Atlantic Veterinary College, back home, on PEI.

"I always loved helping my father with the cattle, at home and just knew I wanted to do something with animals. Whenever dad would have the vet out, I always wanted to be there. The older I got, the more I realized I was interested in veterinary medicine," reflects Katherine.

Upon graduation, Katherine worked at a mixed animal practice, in NS, but ultimately wanted to return to PEI. She is now an associate veterinarian at the Montague and Souris, PEI, Veterinary Clinics.

"I work primarily with small animal," says Katherine, "so I see a variety of appointments from wellness exams and vaccines to sick dogs or cats to surgeries. No two days are the same." Katherine also does on-call and works with some large/farm animals.

"You never really know what you will get into each day," she adds. "It's very common for the schedule to look completely different by noon then it did first thing in the morning."

When Katherine gets a break from her hectic days and on-call, her down-time is still filled with animals. "I like to help my dad (and brother) with the animal side of the family farm," she says. "My favourite way to unwind is feeding calves at the dairy farm, where my fiancé works."

Katherine is grateful for having grown-up with an appreciation for agriculture and hard work. "Making my career in agriculture I am very proud with the knowledge I have and when given the opportunity, I like to share this work people and make people more aware of why agriculture is so important."

When the announcement was made, that NSAC would merge with Dalhousie University, becoming the Faculty of Agriculture, what were your initial thoughts and feelings? Looking back, how do you feel now?

Initially, I was sad. NSAC was always a small tight-knit community which I liked, and I was worried that was going to change. Looking back, and talking to students that have gone there, over the last 10 years, it seems like it still has the same community feel but with the benefits of being part of a larger organization.

How has the campus changed in the last 10 years?

With the pandemic, I haven't had an opportunity to return to campus in the last few years. I would say the most notable changes are the Cox and feed mill rebuild. I hope to get to visit the campus again in the near future.

What is your favourite memory from your time at NSAC?

I have so many memories from my four years at NSAC - making friends in residence, getting up at 4 a.m. to milk at the RAC, to nights at the Barn (campus pub). It's hard to pick one, but if I had to choose, I would say meeting all kinds of people and making some lifelong friends, including my fiancé.

Wiebe & Samantha (Keeping) Leenstra

Her story started off familiar – city girl, with no hands-on agricultural experiences, and a life-long dream of working with small animals, becoming a veterinarian. But a student position on the campus farm, during second year at NSAC, changed her direction.

"I stated working on the campus farm, looking to gain experience with animals and seeking employment," says Samantha Leenstra. "Unpredictably, I fell in love with everything agriculture, with a passion for dairy." She also fell in love with a boy, who was earning his diploma, before returning to take over his family dairy farm.

Today, Samantha and the boy, now her husband, Wiebe, milk 250 cows at their family farm, in Salisbury, NB, alongside their three young kids (ages six, five and three). Salisdairy Farm Ltd. is a closed herd, milking only pure-bred Holsteins, raising their own young stock. The farm encompasses 650 acres, growing grass, alfalfa, clover, and corn silage.

"Since having the kids, I've had to step out of the day-to-day on the farm," says Samantha. "But I stay involved with administrative work and updating our dairy milking software with whose been bred, calved, dried-off, etc."

The youngest of four, Wiebe waited patiently for his older siblings to choose their career paths, knowing farming was in his heart. When the opportunity presented itself, he was more than willing to step-up and take the reins from his parents.

"Wiebe's parents are still involved and help out. We also employ three full-time and six part-time staff," Samantha adds. "We milk in a 40-stall internal rotary, three times a day, averaging about 40 litres, per cow, per day."

Becoming a dairy farmer may have been a shift in direction, for Samantha, but her passion remains the same.

"My passion with agriculture is truly the animals. For me, there's just something about seeing those new babies arrive and making sure they are given the best life possible."

Samantha admits that coming from no agriculture experience, the AC taught her theory, but with her lifestyle, she enjoys applying these theories, continuing to learn new ones, and comparing them with the old. She also loves educating others and sharing her knowledge of agriculture.

"I always enjoy explaining to my family and friends, "in the city", about farming, in a way they might understand and appreciate."

When the announcement was made, that NSAC would merge with Dalhousie University, becoming the Faculty of Agriculture, what were your initial thoughts and feelings? Looking back, how do you feel now?

When they announced the merger with Dalhousie, I initially felt it was the end of the traditional AC in the ways we knew it. I thought it would be the end of the "farming" culture that has always been a huge part of the atmosphere of the school. Looking back, we were passionate about who we were as "Aggies", and this is something I still am proud to share.

How has the campus changed in the last 10 years?

I can't speak much to how the school is now, or since the Dalhousie merger, since we were the first graduating class, holding tightly to the values we had in the years prior. But I like to think that true Aggie spirit lives on!

What is your favourite memory from your time at NSAC?

"I really enjoyed my job, working at the Ruminant Animal Centre, as well as events such as College Royal and Woodsmen. I guess meeting Wiebe was also a pretty important moment!"

Kubota Canada for earth, for life

On the Dalhousie Agricultural Campus, the entire campus is a classroom.

To be workplace ready and industry relevant, student learning must move beyond the physical walls of the classroom and into the gardens, fields, barns, tanks, and clinics across campus.

Such is the idea behind a new partnership with Kubota Canada who has generously provided the Faculty of Agriculture with the use of six pieces of landscape and grounds maintenance equipment for a three-year period. This leading- edge equipment and technology will support managed landscapes programs and campus operations.

"The educational experience of students in the Managed Landscapes program will be enhanced with access to leading-edge equipment and technology," explained Dean David Gray. "Kubota's commitment to high quality, performance-driven products make them a perfect industry partner."

Valued at over $20,000 per year, this three-year commitment from Kubota Canada and local retailer Central Equipment, provides an opportunity to renew for an additional three-year period, with rolling annual commitments.

Students will have the opportunity to gain experience with industry-leading equipment and technology. Integration of equipment into coursework and research means students will gain exposure and training with Kubota's innovative product line, better preparing them for careers in managed landscapes.

"I am blessed to be working for Kubota Canada Ltd and to be able to partner with Dalhousie University and the Faculty of Agriculture to provide equipment exposure to the next generation of students and industry people in the horticulture, landscaping and agricultural communities," said Regional Sales Manager of Kubota Canada, Larry Mailman (Class of '82). "I feel the driving forces behind Kubota and the Faculty of Agriculture have many similarities and the next generation of students will go on to accomplish world changing things for the good of humanity and our environment."

From a research perspective, Kubota equipment is very precise, offering great value in preparing research plots. Plots are often small, with limited space and precision and specific turning abilities allows for multiple research plots studying varying criteria, all within a specific land area.

"We often say that our alumni are our greatest champions," added Dean Gray. "We want to recognize two special alumni who have made this gift possible. Larry Mailman, who was instrumental in creating this partnership and Chad Bower (Class of '00), owner of Central Equipment who has been critical in facilitating this gift and will be a crucial partner in servicing and maintaining this product line."

Plant based protein

Dr. Gumataw Abebe

Each time Dr. Gumataw Abebe visits his local grocery store, he is pleasantly surprised to discover more plant-based protein items on the shelves. Not just for the added choice it offers consumers like him but also because he can see the financial and sustainability opportunities the sector offers for Atlantic Canadian farmers.

"Plant-based and alternative proteins are one of the largest food growth sectors in the world, with global market demand projected to reach approximately $143 billion US by 2035 and comprise 10 per cent of all protein servings," explains Dr. Abebe, assistant professor at the Department of Business and Social Sciences at Dalhousie University. "We will see more growth here based on consumer demand, so I am interested in the potential for our region's farmers to benefit from this trend."

Dr. Abebe is assessing those opportunities as part of Plant Protein Atlantic: Exploring the Value of Plant Proteins in the Atlantic Region, a major research initiative funded in part by Protein Industries Canada. He is conducting a plant protein value chain analysis that will engage three key stakeholders: consumers; processors and manufacturers; and regional farmers. Through surveys, he hopes to gain insights on consumer demand and expectations, the requirements that must be met to attract processors and manufacturers, and the interest, market access, and regulatory challenges that will influence interest in plant proteins among regional growers and cattle farms looking for alternative feed.

"Atlantic Canada is a significant crop producing region, but that activity is not occurring at the same scale as we see in other parts of Canada," Dr. Abebe says. "As a result, the major plant-based protein food and feed manufacturers are all based in Western or Central Canada. But if we can establish that there is a big consumer market for these products here, we can present growers with options to participate in this sector, and then make the case for processors and manufacturers to expand here."

This undertaking is one of many that Dr. Abebe is engaged in to explore the efficiency and effectiveness of agrifood supply chains in responding to food safety, food quality, and food security challenges. These chains—which consist of many stakeholders such as producers, manufacturers, and retailers—require considerable coordination to achieve value for consumers. But the ability to coordinate activity is often hampered by a range of pressures, including stakeholders maximizing their profitability at the expense of other parties and, most recently, the COVID-19 pandemic, which has resulted in supply disruptions and increased costs.

"The pandemic brought additional complexity to a chain that is already very complex," Dr. Abebe says. "It also raised questions about relationships along the chain that appeared to be very vibrant and robust. Given that added complexity, I am engaged in several projects to analyze the impact of the pandemic, including its implications for the food services industry."

Specifically, Dr. Abebe is studying how the pandemic changed consumer dining behaviours and what that change will mean for casual and fine dining restaurants. A nationwide survey he co-conducted of more than 1,000 consumers revealed that Canadians embraced the off-premise dining options offered by restaurants during the pandemic—a trend he believes will continue. Dr. Abebe is now assessing data from a survey of restaurants to see how their perspectives match those of consumers but, overall, he thinks it is unlikely we will see a return to the dine-in only model.

"Many restaurants probably never thought anything like COVID-19 could happen," he says. "But it did, and it has been a big lesson for them to adopt a multi-channel approach and be more flexible in terms of how they operate so they can navigate other crises that may arise."

The pandemic has also informed another study by Dr. Abebe. He is looking at the movement toward short food supply chains, which are highly localized and characterized by closer relationships between producers and consumers, as a response to COVID-19-related disruptions in the global food chain. "Without these chains, the impact of the pandemic would have been much worse, so we want to explore the opportunities for them to complement our food system," Dr. Abebe says. "One of my undergraduate students was able to prepare an excellent thesis on this topic and it has been submitted for publication."

There are many other aspects of our agrifood supply chains that Dr. Abebe plans to investigate, such as the pork value chain and how growers can enhance sustainability without compromising their profitability. Although his work is somewhat diverse, it all has the same aim. "It's all about making the relationships along these chains more efficient and effective so that they better respond to societal needs and concerns," he says. "It is exciting and I hope it contributes to making the food we consume safer and more sustainable."

Corn production and resiliency

Dr. Yunfei Jiang

Severe weather events, dry growing conditions, and pest infestation—these are some of the challenges Atlantic Canadian farmers are facing due to climate change. As the incidence and severity of these threats rise, so too does the risk to the livelihood of our region's farmers and to our food security, necessitating innovative research that enhances crop stability and sustainability.

Enter Dr. Yunfei Jiang. an assistant professor in Agronomy at the Department of Plant, Food, and Environmental Sciences with the Faculty of Agriculture at Dalhousie University, Dr. Jiang is exploring ways to improve crop production and resilience in the face of these challenges. She is particularly interested in improving nutrient use efficiency and crop resilience to climate change factors (such as heat and drought). She is also interested in exploring the role of precision agriculture technologies in cropping systems.

That focus is exemplified by a proposal she is developing in partnership with Drs David Burton, Derek Lynch, and Brandon Heung at the Department of Plant, Food, and Environmental Sciences, and with Dr. Kathleen Kevany, an associate professor with the Department of Business & Social Science, to assess the agronomic, environmental, and economic benefits of integrating legumes into crop rotation in the Maritimes.

If successful, this five-year project will launch in 2023 with two cycles of three-year rotations: legumes in the first year followed by wheat and corn in the second and third years, respectively. The inclusion of legumes could help reduce nitrogen fertilizer use, and thus nitrogen dioxide emissions, while improving soil health and biodiversity. It could also enhance crop revenues, which is why the last two years of the project will focus on potential economic benefits.

"Many research projects only focus on one potential benefit, and it is typically agronomic," Dr. Jiang says. "As a result, it is difficult to convince growers to adopt the research if there is no consideration of profit, which is why we are looking at all three factors."

Dr. Jiang is also developing a Canadian Foundation for Innovation John R. Evans Leaders Fund proposal for infrastructure funding for crop improvement in Canada. If successful, it will enable her to launch a precision agronomy lab to help growers optimize food production and reduce their ecological footprint. For example, she envisions investments in technology such as sensor-equipped drones to create data-rich digital crop maps that support more informed decision-making and site-specific management approaches for issues such as nutrient deficiency, drought stress, and pest pressure.

"I will be working with industry partners, such as the Atlantic Grains Council and Eastern Canada Oilseeds Development Alliance (ECODA), to explore industry needs and adjust my research priorities," Dr. Jiang says. "That could be testing new fertilizers or different seeding rates/dates or different cropping systems to assess their benefit in crop production and provide the best recommendations for agricultural practices."

In addition to these proposals, Dr. Jiang is partnering with Dr. Claude Caldwell, Professor Emeritus with the Department, to assess the potential of intercropping—a practice that involves growing two different crops in the same field at the same time to improve in field biodiversity and enhance environmental and economic stability. Drs Jiang and Caldwell are conducting two intercropping studies: one involving field pea and mustard and the other involving field pea and camelina in Nova Scotia and Prince Edward Island.

"Some research shows that there are more benefits to using land to grow two crops than one," says Dr. Jiang. "We want to conduct studies to assess factors such as land use efficiency, yield, and whether growing different crops will generate more profit so we can make informed recommendations to growers in the region." She adds that field pea was chosen for the study because it is high in protein and, as a legume, has the potential to provide nitrogen to the other crops and this enable growers to reduce their fertilizer use. However, there are several other factors to consider for intercropping, such as matching maturity and seed separation.

The study will build on earlier research Dr. Caldwell conducted in Nova Scotia, New Brunswick, and Prince Edward Island in 2018-2021. In particular, in 2020, he found that intercropping resulted in more crop yield for Truro-area farmers than would have been possible if they had planted one crop in the same land area. However, the COVID-19 pandemic and a severe drought in Prince Edward Island has hampered further study efforts.

"Although the 2020 data is good, we would be more comfortable in terms of providing recommendations to growers if we have multiple years of results," Dr. Jiang says. "We applied to ECODA for funding so we could gather the robust data we need to help farmers maximize yield and mitigate the impacts of climate change."

As for the future, Dr. Jiang is interested in exploring novel agronomic practices to further improve crop yield and mitigate climate change impacts. She will also study physiological mechanisms that govern plant performance in cropping systems to improve efficiency in the use of resources such as water, enhance crop resilience to stressors such as heat, and increase crop yields. The potential for new discoveries that enhance food production and security while meeting economic and environmental sustainability requirements is enormous and that is what she loves most about her work.

"It is exciting to be able to work with so many different groups of people who share learnings and the same goals," she says. "I am sure there will be much more to explore and that our work will contribute to enhanced crop production and food security in Atlantic Canada and nationwide."

Barley Party

We barley made it seemed like an appropriate theme for the first non-covid Barley Party, which took place in April, on the Dalhousie Agricultural Campus, since 2019.

However, the pandemic still interfered, and the event didn't quite go as planned. Despite being shipped from the ring designer early, logistical delays prevented the rings from arriving in time for the event.

"Despite doing everything within our means, the rings did not make it," said Alumni Relations Manager, Alisha Johnson. "We were incredibly disappointed for the students who worked so hard." But the event went ahead, nonetheless.

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 enjoy a delicious meal and one-by-one are called to the front of the room to accept their Barley Ring. Students are welcomed to the Agricultural Campus Alumni Association by Colette Wyllie, chair of the Alumni Association and are presented their rings by Dean Dr. David Gray.

"Receiving their Barley Ring is definitely one of the most anticipated events for graduating students," she added.

In lieu of their rings, students were still called to the front and presented with a special gift. Barley Rings were distributed to eager graduates once they arrived, one week later.

"The Barley Ring symbolizes everything that the Faculty of Agriculture stands for — integrity, professionalism, hard work and a connection to the land," says Colette Wyllie. "It unifies our community across the globe. Barley Party has become a beloved tradition amongst graduating students and it's fantastic to see the uptake from relatives who are graduates from years prior. The event feels more and more special every year!"

Those in attendance, at the Barley Party, were prepared to receive their rings. But one individual was not. An annual tradition of Barley Ring celebrations is to honour a deserving individual who wouldn't ordinarily be eligible to receive a ring.

These honorary rings are awarded to individuals who do not meet the criteria to be eligible for a Faculty 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 recipient encapsulates and perfectly demonstrates what it means to be an Aggie, Joy Galloway Jones was the 2022 recipient of an honorary Barley Ring.

Joy is dedicated to not only student academic success but to enhancing the overall student experience. She is an advocate for students in the classroom, in athletic pursuits and in their careers. She is enthusiastic about agriculture and especially the AC community.

"Joy is an advocate for students both in the classroom, in extracurriculars, and supporting students through summer employment positions in agriculture," said Dalhousie Agriculture Students Association President Codie O'Neil. "She is a true Aggie through and through and we cannot think of a more deserving person."

Joy has proven time and again she is dedicated to student success at the Faculty of Agriculture, holding several different student-focused positions since 2013.

Joy is currently the Manager of Work Integrated Learning programs on campus, a position she initiated in 2017 and one in which she truly shines. As the manager of the Aggie WIL program, Joy has worked to help students network and create meaningful connections in the agricultural industry, many of which have led to students jumpstarting their careers.

On top of her day job, Joy is also the Dal AC Advisor for the World University Services of Canada or WUSC providing support and financial assistance to student refugees. However, Joy is probably best known for being the very dedicated coach of Dal AC's very successful cross-country running team.

Outside of Dalhousie University Joy is very involved in the Truro/Bible Hill community as a regular volunteer with many organizations. Among her many achievements, she is the first female officer of the Truro Fire Service and was recently presented with the Community Perseverance ACE Award by the Fundy Female Leadership Network. Joy has been a captain with Truro Fire Service for three years and a lieutenant before that.

Joy Galloway Jones always encourages students to share their successes and achievements and is extremely proud of her students and student-athletes. She spends much of her free time giving back to the community and to the AC, and is an all-around encouraging, supportive, and caring person with a passion for agriculture and student success.


Class of '22
Proud Aggie
I did it for the ring!
I BARLEY made it!
I BARLEY made it!


Aggies once, Aggies twice...
I can Barley believe it!
I BARLEY made it!
I BARLEY made it!
Class of '22


2022
DALHOUSIE UNIVERSITY
Aggies Once
Aggies Twice

Dalhousie University Aurum Awards

Meet 2022 Aurum Award winner Sidney Peters, who was chosen by his peers to receive a prestigious alumni award for his outstanding achievements and innovation, community engagement and leadership.

Creating opportunities: Chief Sidney Peters has bold ambitions for Nova Scotia's Glooscap First Nation

Chief Sidney Peters (Class of '84) is the fourth chief of Nova Scotia's Glooscap First Nation. Drawing on his experience with Indigenous housing programs, he's leading efforts to rebuild the community's fortunes and pride through new policies, housing and investments. Next up: financial self-sufficiency.

When Chief Sidney Peters became the fourth chief of Glooscap First Nation in 2012, the community was struggling. The population was aging, economic activity was limited and issues related to band remuneration not only hamstrung community investments, but also attracted considerable negative media coverage.

"People in the community were ashamed," recalls Chief Peters. "The challenge was how to bring back the pride of being a Glooscap band member."

Rebuilding trust

The priority for Chief Peters was to rebuild trust and respect for the community's governance team. He led the development of new band policies and procedures and proposed new salaries.

"We were starting from scratch," Chief Peters says. "Part of the reasoning was to recruit or bring back qualified people to help the community grow. Within a year, we generated $430,000 in savings. That enabled us to create more jobs. It also meant we could start sharing the wealth."

To build on that momentum, Chief Peters established Glooscap Ventures, an economic development corporation that is working toward making the community self-sustaining. The corporation has made significant progress in meeting that goal, through the purchase of 28 acres of land for commercial use and controlling interest in a Yarmouth fish plant. Chief Peters has also promoted investments in renewable energy projects such as solar panel installations that are generating additional revenue for community building. He led the development of a new community centre that has a daycare, library and a performance space. And he drew on his extensive expertise working with Indigenous housing programs to construct new homes to bring more families into the community.

"In those programs, you could get caught up in the dollars or the paperwork," he says. "But if you don't think about the people you're making a difference for, it doesn't mean much. That is what I like about what I do—the knowledge that I've done something that has had an impact for others, like providing them with a place they can call home."

Shared honour

As excited as Chief Peters was to discover that his efforts to strengthen his community had earned him an Aurum Award from his fellow Dalhousie alumni, he sees the honour as a shared one. "It wasn't just me," he clarifies. "It was everybody behind the scenes who did this. I'm just trying to keep it moving forward so there is a better place for the younger ones as they grow up."

That better place that Chief Peters envisions is a self-sustaining community—one that requires no federal funding. But more than that, he envisions a community of wide-ranging professional services and expertise that he hopes all Nova Scotians will draw on when they need anything from financial to legal advice.

"That is what I'd like to see—a future where we do not have to depend on others and our people no longer feel second class or afraid to move forward," Chief Peters says. "I want to continue working toward that until it is time to step back and have someone else take over."

Associate Vice President, Alumni & External Engagement, Sheila Blair-Reid with Sidney Peters.

Dairy Delicious

Our Aggies in the Community themed dinners returned, in May. We were pleased to celebrate the Dairy industry with speakers, Lauchie (Class of '01) and Jolene (Class of '02) MacEachern of Folly River Farm, Chef Reiner, Dr. Ghader Manafiazer, Dairy specialist Faculty of Agriculture and Gerrit Damsteegt, a dairy farmer based in Shubenacadie and a representative of Dairy Farmers of Nova Scotia and Dairy Farmers of Canada.

Current and former directors from the Alumni Association board enjoyed the event and with Manager of Alumni Engagement, Alisha Johnson; Jean Lynds, Brian Crouse, Shelly Juurlink, Colette Wyllie and Dwane Mellish.

Dean's Reception

We were thrilled to host our first Dean's Reception, in over two years, back in June. Special thanks to our very own John Eikelenboom (Class of '76) and wife, Amber, for welcoming us to their property – 1365 Church Street Winery & Vineyard in Port Williams, NS.

Summer Convocation

After a very long wait, graduates from the Class of '20 and '21 were able to officially cross the stage during a special summer Convocation, in July.

Agri-Golf

The 25th annual Agri-Golf Classic was held, in July, at Amherst Golf Club, Amherst, NS. Thirty-four teams participated, in support of student athletics at the Agricultural Campus.

Members of the Class of '10 may not have ranked well, in terms of skill, but they had fun!

L-R: Donald Buchanan, Dan Muir, Colette Wyllie, Luke McLellan

Class of ’53 Reunion
In celebration of their 69th year, members of the Class of ’53 met in July, in Martock, NS. Of the eight members still living, seven were in attendance. Don Miler was not able to attend, in person, but connected by phone to participate in the gathering.
The group looks forward to celebrating their 70th reunion in 2023!
L-R: Jack Aitcheson, Gerald Freeman, Glenn Ells, Lawrence Yeaton, Andy Johnson, Al Blades and Bob McMahon.

Class of ’73 Reunion
Members of the Class of ’73 enjoying a tour of campus back in March.

Convocation ceremonies

A surreal two years of education concluded on Friday, May 27, as more than 140 students crossed the stage to receive their diplomas, doctorates and degrees during convocation ceremonies at Dalhousie University's Agricultural Campus.

A rite of passage

Having your degree or diploma conferred upon you by the Chancellor at Convocation each spring is a rite of passage for hundreds of graduates on the Dalhousie Agricultural Campus and across the university.

This tradition began over 100 years ago at the former Nova Scotia Agricultural College and was held in early May to enable graduates to return home to family farms for the upcoming planting season.

Ten years ago, NSAC merged with Dalhousie University. We gained the resources of a research powerhouse and a place in one of Canada's top-ranked universities.

Dalhousie gained a whole new area of expertise and a beautiful new campus community.

Together, we became more than we were before.

Our uniqueness was celebrated, and our traditions honored. The academic procession continues with piper George MacIntosh (Class of '83 and '92), as well as the valedictory address as part of the overall ceremony.

"It was always the intention to align the dates of Convocation across the university for a full week of celebration, pomp, and circumstance for 18 separate ceremonies," explained Dean David Gray. "It wasn't until the spring of 2020 that we were asked to align our dates closer to those of Halifax and then the pandemic hit," he added. That and the subsequent year were held virtually.

This past spring, Agriculture Convocation was held in person in the middle of university-wide celebrations on Friday, May 27th. This enabled the end of classes, exams, and final checking of parchments to take place across the university before Convocation began.

"There has been a commitment moving forward to make every effort to ensure the Agriculture ceremony is held first after the long weekend in May," added Dean Gray. "This will honour our tradition of a May ceremony while aligning logistics for planning on the main campus."

Meeting with the Dal Convocation team shed light on the logistical considerations needed for a convocation ceremony for Alumni Association Board member and secretary Robyn McCallum (Class of '13).

"The Convocation planning team was open to feedback about the crunch times we face in the agricultural sector, especially with planting and first cut and I found them willing to work with the Alumni Association board of directors to maximize the student experience," she said.

"In the end, we have the same goals — to celebrate our students in a way that respects the unique cycles of farming and enhance the student experience. It was a respectful dialogue and I'm pleased they were open to meeting. Dean Gray was a clear champion for students on our campus and we are fortunate to have a leader so well-connected to students," she added.

Second time is a charm for farm owner and operator Ella Oulton

Ella Peck has wanted to be a veterinarian since the age of four and when she graduated high school in 2013 was attracted to the modest and kind community at the Faculty of Agriculture.

Unfortunately, family tragedy changed Ella's trajectory.

"My family experienced five deaths within a short period of time during my first year at the AC," explained Ella. "Because of this, I felt very overwhelmed in school and decided to take some time away."

Time away including working as a herdswoman at Homtosta Holsteins in Bridgetown, Cornwallis Farms Ltd. in Port Williams, and as a farmhand at Oulton's Farm in Martock. The Oulton farm belongs to the family of her partner Wyatt whom she met during her first year on campus.

During this time an opportunity arose that enabled Ella (now Oulton) and her husband Wyatt to purchase a 40-acre farm in Martock and further diversify the 6th generation family farm.

"I had much hands-on experience, but the desire to finish my degree never subsided," said Ella. "It was a balancing act returning to campus when our son was ten-months old as I continued to breastfeed, and it had only been a few short weeks since we had started our farm!"

Ella travelled three hours, each day, to attend class, while together, with her husband, helped to operate a beef, free-range turkey, and fruit crop farm in Martock along with their four-year-old son and eight-month-old daughter.

"Despite returning as a mature, distance-commuting student, the faculty welcomed me back with a lot of warmth and encouragement," added Ella

Ella completed her Bioveterinary Science degree and graduated this past May.

Each fall, the Oultons raise free-range turkeys, and they plan on diversifying their farm further with sheep. This past September, they held their first annual online cattle sale with several lots and were delighted with the response and support of their community.

Ella has also learned over the past few years that she is also passionate about molecular genetics, immunology, epidemiology, and microbiology.

"I am very interested in biosecurity and its implications and am interested in creating better protocols for our farm as a preventative measure for optimum herd health and food safety," said Ella. "Molecular genetics and microbiology courses were very hands-on and had an exciting laboratory component. My professors

were very passionate about the courses they taught, and their enthusiasm was very infectious."

Before having the farm and her children, Ella used to work at the Aquaculture Centre on campus and volunteered with the Central Nova Animal Hospital. She also volunteered to milk at the Ruminant Animal Centre which started her love for agriculture. Ella continues to volunteer at a clinic in the HRM and has been involved in the Hants County 4-H beef club.

Ella was the recipient of the Dr. Allan & Barbara MacKay Scholarship, the Kings Mutual Insurance Scholarship and an Alumni Family Bursary and while life may have set a different timeline for Ella, she is still passionate about her academic and career goals.

Ella's first career goal was and continues to be applying to the Atlantic Veterinary College to become a veterinarian. She is also not ruling out a job with the Canadian Food Inspection Agency.

"I want to use my skills to further the success of our business, whether I can use my veterinary skills for the care and welfare of our animals, or microbiology-based knowledge to implement important biosecurity protocols," Ella explained.

Appindale Acres

Lisa Purcell (Class of '87)

Lisa Purcell began her journey with little to no agricultural experience. Now, 35 years later, she has lots – and it's versatile.

Growing up in Saint John, NB, Lisa's grandparents had a small farm. "My grandparents farm piqued my interest and admiration for the agricultural industry," she says. "I was interested in raising animals and learning where food comes from." Which is what led Lisa to an animal science education at NSAC.

After graduating, Lisa started her career working in various agricultural research jobs, in NS and then PEI. She then went on to spend 28 years managing a veterinary practice.

It wasn't until the last few years, as retirement drew near, for Lisa and her husband, David Condon, a veterinarian, that her work in agriculture really flourished.

"David and I started to wonder what we would do when we retired." Sitting on over 100 acres of farmland, in Bonshaw, PEI, made for ample opportunity. Appindale Acres was born.

"Two farms are on this property, that have been in David's family, and we now live on the farm property where David grew-up," says Lisa.

Appindale Acres is a combination of David and Lisa's passions and ideas.

"My pride and joy live in the barn," says Lisa, referring to her seven sheep and ram. "I've recently been learning to spin the wool," she adds. David and Lisa also process and sell lamb and have chickens roaming their property.

During the spring and summer, Lisa's time is most consumed in her vegetable garden, from which she runs a small community shared agriculture (CSA) program.

David mills wood from their property, creating one-of-a-kind tables, benches, pens and other wood products. He also has 12 beehives, from which he bottles and sells honey and sits on a number of bee committees.

David and Lisa are a team, working in tandem and supporting each other, which has resulted in value-added products.

"With all of the honey from David's bees, I did some research to see what else we could do," Lisa says. A few experiments later, she was using the honey and beeswax to create her own soap products in the basement of their home. "I use the hot process method, creating many different scents, and colours with natural ingredients, in different molds."

David and Lisa sell their wide variety of products, from Appindale Acres, directly from their barn storefront. But it didn't all happen overnight.

"As the thoughts of retirement drew near, we started to dabble with our interests," says David. "Over the last year we gradually stepped back from the veterinary practice, spending more days on our farm."

David and Lisa just recently sold their veterinary practice, embracing "retirement" full-time.

As David and Lisa are beginning this new chapter in their lives, Lisa can't help but reflect on her days at the now Faculty of Agriculture, the place that jump-started her career and awoke her passions.

"I'm grateful for the skills I learned at NSAC," she says, "but also for the friendships. A group of us are still connected, talking monthly and meeting annually. We have fun and we compare experiences as we are all still involved in agriculture."

Over the last few months, it was hard for Lisa not to reflect on her time at NSAC. She spent many days, in her basement, making custom soap for the Faculty of Agriculture's newest graduates, the Class of '22. The gold-coloured bars, embossed with barley and placed in branded bags, were given to the Class of '22 as a gift from the Alumni office.

"I am truly honoured to be able to share my products with the Class of '22," adds Lisa.


Appindale


DALHOUSIE
UNIVERSITY
FACULTY OF AGRICULTURE
CLASS OF '22

Dr. Robyn McCallum

(Class of '13)

President, Miramichi Salmon Association

Robyn McCallum began her studies at the Nova Scotia Agricultural College, graduating in 2013 with a BSc (Agr) in Animal Science. Not only was she a part of the first class to graduate from the new Dalhousie University Faculty of Agriculture, but she was also president of the Students' Union (now Dalhousie Agricultural Students' Association) at the time of merger. Robyn continued her studies, obtaining her PhD (Biology) through Dalhousie University.

Robyn's experience in agriculture is well versed – she worked on a native bee project in wild blueberries, in NS, which she turned into her fourth-year project, her PhD thesis and then early career. Simultaneously, Robyn and her husband, train and show Belgian draft horses at competitions, across the Maritimes and farm at their home in northeastern NB.

Robyn became a new mother, during the early days of the pandemic, as she and her husband welcomed Emmett to the farm (and barn). She was then ready to be closer to home and take on a new challenge. In January 2021, Robyn became the president of the Miramichi Salmon Association, overseeing research and conservation programs for Atlantic Salmon on the Miramichi River—one of the greatest salmon runs in the world.

"Before the pandemic and becoming a mother, I was working all over Atlantic Canada, as a bee researcher, a role I really enjoyed," says Robyn. "There is a ton of overlap between bee research and salmon conservation that I never expected, but really enjoy."

Some days Robyn is in the field conducting a population estimate or restoring a cold-water pool. Other days she is coordinating an invasive species project, applying for funding, working with her hatchery team to introduce new technology, meeting with government representatives about policy, working with members on a fundraising project, or coordinating education programs.

Every day is different, but there's also no shortage of challenges.

"Whether it's food production or conservation, public trust is a challenge I continue to work on as part of my job," says Robyn. "Communication and bridging groups are other major challenges. One challenge that I enjoy is recognizing most groups share similar values, and working to connect and support those shared values, even though we may start from different positions."

Upon her undergrad graduation, Robyn was elected life president of her graduating class. She also serves as secretary and board member for the Faculty of Agriculture Alumni Association Board of Directors.

Why is agriculture so important to you?

Agriculture is important to me because I see so much opportunity for those interested in feeding our growing population. More than ever, we need diverse minds working together to navigate the endless challenges facing this sector. I think there's room for anyone who wants to be involved in agriculture.

What are some of the biggest challenges facing the industry today?

If you asked me this six months ago, my answer would probably be division among sectors, the aging demographic, welcoming and supporting the next generation who may not want to farm the way previous generations did, mental health, building and maintaining public trust, etc. My answer right now is more immediate — the sky rocketing cost of food production, sourcing critical inputs, fuel cost — in general, the rising cost of doing business. I think there's a movement within the industry for farmers to have more stable incomes and healthier family lives, and these latest challenges do not help those initiatives.

Taking you back to your undergrad days, what was your initial reaction to the announcement that NSAC would merge with Dalhousie University, becoming the Faculty of Agriculture?

I had a mixed reaction. I was one of those students who valued the Dalhousie brand and thought the merger would give the school more recognition of its 'Dal degrees', even before the merger.

I was worried that the farm on campus could be negatively impacted, and that tuition would increase. As student president, I was worried our campus values and successful programs, or initiatives may be superseded by existing Dal programs or policies.

Looking back, how do you feel now?

I look back on the merger, much more positively. Although there were growing pains, this merger opened many doors and opportunities for students and faculty. I think it positions the Faculty more strategically to meet global and modern challenges. It allowed us to see the benefits of being part of something larger, but also recognize the strengths of a smaller school, and how we could hang on to those.

How has the campus most changed in the last 10 years?

I think the campus has maintained its personal and practical feel. The campus has learned to hang on to the aspects that make it special, but also embrace new opportunities through the merger with Dalhousie.

The Agricultural Campus is a pretty special and unique place, as we hear over and over. What's your favourite characteristic of the Agricultural Campus?

The personal touch and feel of the campus. I loved being in small classes where profs knew my name, the kind and knowledgeable nature of staff, the beautiful gardens, and the history of the school.

Agri Golf Classic

Save the date | July 14, 2023

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