Volume 41, Number 1, 2015 STICE STATES

THIS IS AGRICULTURE



Agricola News

A Message from the Editor



Happy New Year!

I hope you had a very safe, happy and memorable holiday season with your family and friends. A new year brings a fresh start, change. And that is certainly true for the *Agricola News*. We've made a big change.

I am so excited to provide you with the *Agricola News* in FULL CO-LOUR! We've been wanting this and we've heard you have too, for a very long time. We've finally been able to make it happen. We hope you

will enjoy reading the content and scanning the photos, in colour, that much more.

And there's lots to look at in this issue.

This fall, Dr. Gray proudly launched the first Strategic Plan for the Agricultural Campus. Inside you will read where campus is headed in the next five years and what goals we hope to achieve.

Dr. Gray shared this new plan with alumni who attended our annual Dean's Receptions, which we hosted across the Maritimes thought the fall. Our first stop was to Antigonish, where we hosted an event for the first time. Our receptions in PEI and the Valley are really growing, which we are so pleased to see. It's great to see regular faces at these events. We also returned to Sussex again this fall and had a huge increase in attendance. You'll see some photos from these events and others, inside this edition.

In October I attended the Dalhousie Alumni Awards, along with Dr. Gray and members of the Alumni Association Board of Directors, where our very own Dale Ells was honoured. Dale was presented the A. Gordon Archibald award for his volunteerism to the university (page 5).

In November, three other deserving alumni were honoured during our annual Blue & Gold awards, at the Agricultural Campus. Both Philip Keddy and Peter Corey are fairly recent graduates who are making a big impact. Dr. Garth Coffin, former campus principal, truly has had a distinguished career. You can read more about these award recipients on page 21.

In 2014 we celebrated the United Nations International Year of Family Farming. Each month, we turned the spotlight on one alumni family farm across the Maritimes. We visited these operations and told their story. We proudly shared a number of these stories with you in the last edition of *Agricola News*. These features were such a hit (and rightfully so) you will find several other alumni family farming features in this edition. Even though 2014 has come to an end, we're hoping to keep this program going. We have so many alumni with family farming operations, we could highlight one per month, for years! If there's someone you would like to see highlighted as part of our family farming series, please let me know.

One other change you may notice in this edition is the absence of the In Touch section. This section features little updates or snippets from alumni, first-hand. We had no choice but to leave this section out as you haven't been sending us any! We know you love to browse through and see who you know and what they are up to. Please send us your updates so we can include this in the next edition.

It's certainly been a busy time in the Alumni office on the Agricultural Campus. And we love it! On top of these few highlights, there are so many other activities to read about inside this edition of *Agricola News*. Don't forget to also check-out our Up-Coming Events section, to see where we are headed next.

Keep in touch!

Alisha Johnson

Mlisha

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Agricola News

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COVER

The Faculty of Agriculture launched its first Strategic Plan this fall. Inside you will read more about the plan, **THIS** IS AGRICULTURE and how it will shape programs and activities on the Agricultural Campus over the next five years.

HIGHLIGHTS

International Year of Family Farming

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We continued to shine the spotlight on alumni family farms throughout 2014, to celebrate the International Year of Family Farming. Check-out more of the great farming operations we visited and read their stories.

Blue & Gold Awards 2014

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Philip Keddy, Peter Corey and Garth Coffin, three very deserving alumni, were honoured during the Agricultural Campus' annual Blue & Gold awards.

Legacy Project

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The Alumni Association officially unveiled their Legacy Project this fall. The project serves as an honour to the past and pays tribute to the former NSAC.

Partnership with the NS 4-H Council

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The Agricultural Campus and the Nova Scotia 4-H Council have embarked upon a new partnership for the 2014/15 year.

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A Message from... Welcome Messages



Happy New Year fellow Aggies! As we enter the New Year, it is a great time to look forward to the opportunities 2015 will bring and to look back at our accomplishments in 2014.

Lots has happened since our last edition of the *Agricola News*.

October was the re-launch of Home-coming. This is a real effort to provide a fixed date/weekend for alumni to return to campus. This event is tied in with College Royal, tours, breakfast at

the library and athletic events. We are also open to suggestions! We hope Homecoming will continue to grow as we always like to have our alumni come home. Mark October 16 &17, 2015 on your calendar!

November 6 was a very special night on the Agricultural Campus as we celebrated three outstanding alumni who represent all that is good in agriculture and we revealed our NSAC Legacy Project. Each of our award recipients have contributed to agriculture in very diverse ways but all with a common goal to provide opportunity through agriculture and contribute to their communities both locally and globally.

The unveiling of our Legacy Project was an added touch to an already special evening. This project was a commitment of the Alumni Association Board of Directors to dedicate something to our campus to honour and celebrate NSAC. Our Legacy Project was designed and hand-crafted by one of our own, alumnus Shawn Taylor (Class of '94). Shawn's masterpiece provides an instant and elegant connection to NSAC - a place that we all called home.

The fall was very busy with the Dean's alumni receptions that had stops in Canning NS, Antigonish NS, Charlottetown PEI, Sussex NB and the Royal Winter Fair in Toronto - and one more stop scheduled for Gander, NL in February. This is the forth year for these receptions and we feel they are very important and worthwhile to ensure we provide opportunity for alumni to connect with what is happening on our campus. We very much appreciated the turnout and enthusiasm by all alumni who attended.

In closing, I would like to recognize and acknowledge the commitment of our Principal and Dean, Dr. David Gray, to our alumni family. Since David's arrival on campus, just over a year ago, he has demonstrated that he is totally committed to agriculture, the student experience, our campus and us as alumni. David's enthusiasm and passion has been very reassuring as the merger with Dalhousie has been a challenging time for some - full of mixed emotions and the unknown. I am optimistic that with the launch of our strategic plan "THIS IS AGRICULTURE", David's vision and leadership and our continued support as alumni, that we will continue to be the same great campus... and even better!

Jean Lynds (Class of '90) Chair, Agricultural Campus, Alumni Association

The Dean



A new year is filled with so much possibility! And nowhere is this more true than at Dalhousie University's Faculty of Agriculture.

I was so pleased to be able to meet so many of our alumni across the Atlantic Provinces this past fall and share with them our new vision for our Faculty of Agriculture – and I will be meeting more of you when I travel to Newfoundland in 2015. Our alumni have and will continue to play a key role in helping us educate our communities on the modern face of agriculture.

It has been two years since we joined the Dalhousie University community and it is my pleasure to introduce and share with you, the first Strategic Plan for our Faculty: The Faculty of Agriculture.

In my role as Dean of the Faculty, people often ask "what is agriculture?" Almost immediately, my mind takes me to the range of teaching and research on this campus that is redefining our relationships with our landscapes, our oceans, our food sources and even our healthcare systems. Our commitment in these next five years is to peel back the layers of this question and rather than tell you, we will be showing you: This is Agriculture.

Agriculture is grounded in developing and sustaining life at a fundamental level, but also developing communities around our agricultural activities and responding to the health and wellbeing of such communities, locally, nationally and internationally. As such, the world-leading work we undertake as a Faculty and through our alumni, pushes the boundaries of what we understand to be agriculture and so it should.

As you and I know, to practice agriculture means to use natural resources to produce commodities that maintain life, including food, fibre fuel, forest products and their related services. This includes arable farming or agronomy and horticulture, all terms for the growing of plants, animal husbandry and forestry.

We are also very lucky to be able to work on such a stunning campus. Since 1905, we have built an international reputation on being a unique and friendly campus community and a place where people enjoy coming to interact with their classmates and colleagues from all disciplines, backgrounds and even countries.

Our facilities on our campus underpin our excellence in both teaching and research. We are committed to ensuring that the unique nature of studying and working at the Faculty of Agriculture is maintained long into the future.

We are a community, we are a campus, we are a Faculty and we are furthering our mission of showing you and the world: This is Agriculture.

Sincerely,
Dr. David Gray
Dean, Faculty of Agriculture
Principal, Dalhousie Agricultural Campus

Dale Ells (Class of '59) Honoured by DAA

Each year, the Dalhousie Alumni Association Awards recognize a number of Dalhousie alumni for their outstanding accomplishments and contributions. This fall, Dale Ells (Class of '59) became the first Agricultural Campus alum to be honoured by the DAA. During this evening event, Dr. Ells proudly accepted the A. Gordon Archibald Award, which recognizes alumni for outstanding volunteer contributions to Dalhousie.

As a boy, Dr. Dale Ells would travel from his family's farm in the Annapolis Valley to the Nova Scotia Agricultural College. As he stepped up for 4-H judging in livestock and vegetables, and later in 4-H leadership camps, there was no doubt in his mind he'd be studying there one day.

After graduating from the NSAC and McGill, he got into agricultural marketing and began traveling the province. But in 1966, Dr. Ells was named Dean of Vocational and Technical Education when the school announced a substantial expansion. The job fitted him to a tee.

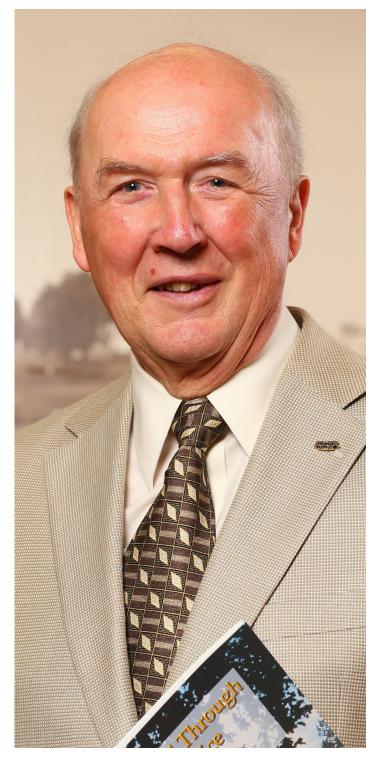
"The Agricultural Campus is the third-oldest centre for agricultural education and research in Canada — and although small, we've had many types of agricultural education and research here," says Dr. Ells, who was deeply involved with expanding facilities, boosting enrollment and launching new programs during his 28-year stretch as dean. "Our facilities have always been among the top in Canada. Just because we're in Nova Scotia didn't mean we were one step behind — we were often leading the charge."

Dr. Ells was instrumental in organizing the Faculty of Agriculture's international programming, which includes development programs in several countries and now involves more than 100 students each year at the Agricultural Campus. He was named Dean Emeritus in 1998, and Alumni Volunteer of the Year in 2005.

Although he retired two decades ago, Dr. Ells remains actively involved with the Faculty of Agriculture. He volunteered with the Colchester Historical Society to launch a display depicting 100 years of campus accomplishments, and wrote a comprehensive illustrated history of NSAC. The 279-page book, *Shaped Through Service*, has become an invaluable resource to staff, students, and alumni -- but Dr. Ells modestly describes it as "an interesting retirement exercise."

As secretary of the Class of '59, Dr. Ells writes newsletters to his classmates twice a year and he has helped raise more than \$40,000 in donations for the Class of '59 Teaching Development Fund. He promotes the Faculty of Agriculture at every opportunity, and says he feels immensely proud when students and graduates win national or international awards.

"A high percentage of our graduates contribute to the Atlantic region," says Dr. Ells. "The Faculty of Agriculture continues to be well-connected to the industry and the people it serves." -- Heather Laura Clarke



Around & About...

Lest We Forget Archie Johnstone (Class of '47)

We received the sad news that Senator Johnstone passed away on November 11, 2014, shortly after this article was writen. Our condolences to his family and friends. We dedicate this story to his memory and life's work.



Each Rememberance Day, we take time to reflect and remember the ultimate heroes of our country. The men and women who have made and continue to make great sacrifices to safeguard the freedoms we enjoy as Canadians.

Faculty of Agriculture alumnus Senator Archie Johnstone (Class of '47), remembers this group of men and women daily, for more reasons than one.

Senator Johnstone can still clearly recall arriving at the No. 76 RAF Squadron in Yorkshire, England, during the Second World War, as a Royal Air Force tail gunner.

"Our pilot called the crew together - all seven of us - and he said, 'I have something to tell you, our chances of survival to the end of our tour are about 24 per cent....'There was no use worrying, if orders were to go, you went," Johnstone says.

While serving, Flight lieutenant Archibald Johnstone was involved in a serious bomber crash, but he was blessed. "I made it back to Canada. I was among the fortunate ones."

Back in the country, Johnstone moved-on with home life and his diverse career on Prince Edward Island. Over the course of his career, Johnstone was a business man, heavily involved in the tourism industry. A substantial part of Johnstone's career included the popular Island tourist attraction Woodleigh Replicas, which he built, shortly after returning from war, with his father. Johnstone also originated Rainbow Valley, Kensington Towers and Water Gardens. The three attractions combined hosted approximately seven million visitors during their periods of operation. Johnstone also served as president of the PEI Federation of Agriculture.

Yet perhaps the most rewarding part of Johnstone's career, one that would bring him back to his Air Force days, came in his 70's.

"I was summoned to the Senate by then Liberal Prime Minster, Jean Chretien. I was one of four representing PEI." Johnstone was appointed deputy chair of the Senate sub-committee of Veterans Affairs. To fulfill the role, Johnstone immediately set-out across Canada visiting veterans.

"I spent not days, not weeks, but months traveling. I visited more than 70 per cent of all the institutionalized veterans in all of Canada," says Johnstone. His task wasn't easy.

"When we got there we'd be seated around a big table and the wheelchairs would be circled around, occupied by veterans with (missing limbs) and the scars of war. Ever since the war ended they'd been there, for decades and decades, in these institutions, some dark and dreary," he explained. Johnstone's mission was to listen and note what could be done for these aging and arguably, neglected heroes.

This was no easy task because the veterans refused to complain.

"They resisted at first. They thought I was just sent from Ottawa and what would I know about war and why do I care?" However, when introductions were made, the atmosphere changed. "They realized we were all over there together," Johnstone remembers.

With patience and persistence Johnstone finally discovered that scores of things were either wrong or missing from the fellow veterans' care.

"They were the greatest, most wonderful people you could have ever met. They had a right to be bitter. But if they were, they didn't reveal it."

After sharing stories and making friends among the veterans, Johnstone, along with the chairman of the Veterans Affairs committee, compiled a report entitled Raising the Bar: Creating a New Standard in Veterans' Health Care. The document included 68 recommendations on



the care of veterans, focusing on key areas such as the inclusion of veterans' facilities under regional health boards, the necessity of guaranteeing the availability of priority beds for the then 250,000 veterans of the Second World War and Korean War and public misconceptions regarding veterans' pensions.

Johnstone is proud to report that approximately 95 per cent of the document's recommendations were implemented within

ten years, dramatically changing the lives of institutionalized veterans.

Being a member of the Senate could easily be the highlight of one's career. It was certainly an honour for Johnstone. "I was so privileged, not to be a senator, that was just the medium - but to get to know all of those veterans. Being a senator got me there."

In June 2014, Johnstone celebrated his 90th birthday at home in Kensington, PEI and one week later his 65th wedding anniversary with wife, Phelicia.

Personally meeting so many of Canada's veterans and being one himself, makes Remembrance Day all the more powerful for Johnstone.

A Leap in the Right Direction Stephanie Hall (Class of '14)

"I feel like this is exactly what I was meant to do."

Stephanie Hall (Class of '14) had no idea that she would be a graduate of Dalhousie Agricultural Campus with a double major in animal science and aquaculture. Originally beginning her studies in science at Mount Saint Vincent University, she knew the Dalhousie Agricultural Campus was the school for her before she even entered it.

"There's so much hands-on experience here and I had heard so many good things about this school," Stephanie describes. "I knew it was the school for me."

After a year of studies at Mount Saint Vincent, Stephanie transferred to the Dalhousie Agricultural Campus. With plans to become a veterinarian, Stephanie's preferred major was in animal science. She decided to also major in aquaculture because she had a high interest in the subject. She soon realized though, that her true passion was in aquaculture. With very little prior knowledge of the aquaculture industry, she was eager to learn more.

"I have always been interested in the oceans," Stephanie explains. "I hardly knew what aquaculture was when I started at the AC but it sounded like a great opportunity so I went for it. I really enjoy the work and I realize now it's what I want to do."

Working and studying in the aquaculture centre at the Dalhousie Agricultural Campus really helped Stephanie narrow down her career preference. The aquaculture centre is focused on increasing knowledge about invasive species in Nova Scotia's waters. Their research has a big impact on the aquaculture industry.

"The big thing we're doing is finding solutions," Stephanie explains. "We're trying to find solutions for the growers when invasive species come in. We try to detect them early so we can control their spread."

Under the supervision of Sarah Stewart-Clark, Stephanie conducted her fourth year research project on an invasive organism that was located on an oyster farm in Nova Scotia. The calcareous tubeworm invaded Eel Lake oyster farm causing a problem for the oyster growers. The species was not known to the area and taxonomists could not determine what exactly it was. What they did know was that it was a major problem.

The calcareous tubeworm fouled the oysters and the grower's equipment. The species had the potential to smother the oysters and left a ring on them when scraped off, giving the oysters an unappealing look. Unable to sell oysters that were fouled by the calcareous tubeworm, the growers reached out to the aquaculture centre for help. Stephanie took on the task of determining what species was invading Eel Lake.

"What we basically did was extracted their DNA and used it to determine exactly what species it was," Stephanie explains. "We determined it was Hydroides dianthus, a species that is uncommon to find this far north on the Atlantic coast."

Stephanie monitored the calcareous tubeworm to learn when and where it was spawning and if the larvae preferred different depths when spawning. She also looked into where the organism came from. It was determined that the species entered Eel Lake, a saltwater lake, through a lone input to the lake from the Bay of Fundy.

"Its native range is along the eastern coast up to Maine," Stephanie explains. "We know it had to have come from that area but other than that we're not exactly sure. It could have been a number of different ways."

Stephanie's research project was a big help to the oyster growers of Eel Lake. She was able to provide them with some answers to their questions about the species invading their oysters.

"The goal was to give the grower some ideas on how to get rid of it," she explains. "They haven't had too much of a problem now."

As a graduate, Stephanie plans to continue to conduct research in the aquaculture industry. With plans to complete a master's degree under Sarah Stewart-Clark in the aquaculture centre and she couldn't be more excited. When she's in the lab conducting her research she feels completely at home. She is where she belongs, doing exactly what she wants to do. For Stephanie, becoming a veterinarian is in the past, she found her true calling in aquaculture. She's not sure yet where her research will take her, but she does know that working in the aquaculture industry is a leap in the right direction.

Research

Breast Cancer Research: no longer just a dream for one Dal AC Master's student

Working on cancer research has always been Wasundara (Wasu) Fernando's dream.

So when she applied for the Cancer Research Training Program Award last March she was hopeful. Not only did she receive the prestigious award, she is the first student from Dalhousie University's Faculty of Agriculture to ever receive the award.

It was Wasu's passion and dedication to breast cancer research and her extensive studies of the anticancer properties of a novel molecule created from apple peel and fish oil elements that earned her the award.

The Cancer Research Training Program (CRTP) is a program of the Beatrice Hunter Cancer Research Institute funded by the Harvey Graham Cancer Research Funds. Supported by the Terry Fox Strategic Health Research Training Program in Cancer Research in the Canadian Institutes of Health Research, the program is offered twice each year to a limited number of students who are involved in cancer research at a recognized institute in Atlantic Canada. The award is presented to graduate students, postdoctoral fellows, medical residents and clinical research fellows and is designed to broaden cancer research initiatives in Atlantic Canada. Along with financial support, the CRTP award offers training through programs and workshops, access to advanced research facilities and interaction and collaboration with successful cancer researchers from across At-

lantic Canada. The program is also designed to allow trainees and researchers to integrate their research, discussing their work and interacting with their peers. This year, Wasundara was one of the graduate student recipients, the only recipient from Dalhousie University's Faculty of Agriculture.

"I feel very honored to have been awarded this opportunity," Wasu says. "It will not only help me in my career, but it will allow

me to contribute more to cancer research across Atlantic Canada."

Born in Sri Lanka and now a Master's degree student at Dalhousie University's Agricultural Campus and under the supervision of Dr. Vasantha Rupasinghe, Wasu is studying molecules in certain foods that could potentially treat breast cancer. More specifically, Wasu is investigating anti-cancer properties found in natural compounds of apples and fish oil that can be combined to treat triple negative breast cancer.

"I'm looking at a combination of two components," Wasu explains. "One from apple peels and one from fish oil and investigating their anti-cancer properties to see how they can act against triple negative breast cancer."

Triple negative breast cancer is a form of breast cancer that tests negative for estrogen receptors, progesterone receptors and human epidermal growth factor receptors. It is reported that triple negative breast cancer has a low prognosis and it cannot be treated by hormone therapy or Human Epidermal Growth Factor Receptor 2 therapy. Wasu is looking at other ways to treat this

type of breast cancer.

"Nearly 15 percent of all types of invasive breast cancer are triple negative breast cancers," Wasu explains. "I'm looking at certain compounds found in natural food products that can be used to treat the disease."

Wasu is investigating certain flavonoids found in apple peels and fish oil and the effects they have on triple negative breast cancer.

"Flavonoids are polyphenol compounds that have tremendous disease-fighting capabilities, especially against chronic diseases such as cancer," Wasu explains.

Wasu explains that Phloridzin (PZ), a compound found in apple peels, has poor bioavailability, while docosahexaenoic (DHA), an omega-3 fatty acid in fish oil, is unsaturated making it unstable and highly vulnerable to a reaction with oxygen. When combined, we expect the bioavailability of PZ is enhanced and DHA becomes more stable which then acts against triple negative breast cancer cell lines.

"In my thesis research, my findings so far indicate that the combinations of these compounds do in

fact show promise as a treatment for triple negative breast cancer," Wasu explains.

Wasu has always had a passion for breast cancer research and she has always known that it was something she wanted to do. Wasu completed her bachelor of science in Sri Lanka at the University of Colombo with a special degree in pharmacy. Her undergrad research was also on natural product chemistry.



"I was interested in finding plants that can heal many kinds of diseases," she explains. "My research was on the anti-inflammatory and painkilling properties of a natural plant extract."

Wasu is currently a faculty member of the University of Sri Jayewardenepura in Sri Lanka on a study leave to complete her graduate studies. In August, she will complete her Master's degree. She will then move on to complete her PhD in the Department of Pathology under the Faculty of Medicine at Dalhousie University in Halifax.

Wasu explains that her research wouldn't have been possible without the help of some very important people.

"I really want to thank my supervisor, Dr. Vasantha Rupasinghe, Dr. David Hoskin and their research groups" Wasu says. "They are all such nice awesome people. I would also like to thank the whole Dalhousie University and of course my family. They have been very supportive."

As for her future plans, Wasu wants to continue her research on breast cancer. She plans to expand her research to both triple negative breast cancer and estrogen dependent breast cancers. She hopes to apply her research beyond Canada too. Her goals are big and it's her passion for research and helping others that will help her reach them.

"Working on cancer research has always been my dream," Wasu explains.

And with her hard work and dedication, her dream has become a reality.

The Zhuhui Ye Memorial Award

Zhuhui Ye (BSc'12) was an aquaculture graduate student who smiled easily, had friends across the campus and was always happy to help someone pass their driving test.

Known to many students as "Kevin," the popular 23-year-old student lost his life in 2012 in a drowning accident at Dollar Lake Provincial Park, near Stanfield International Airport.

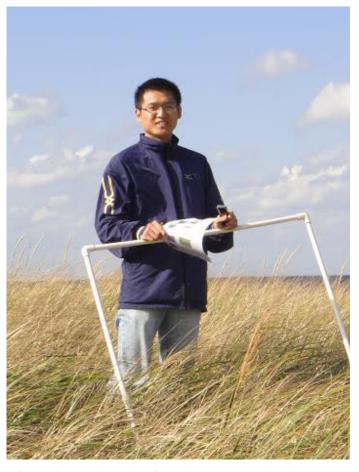
His best friend, Qi Liu, was at the lake with him on that fateful September afternoon — and he's making sure Zhuhui's memory lives on.

Liu and his friends in the Faculty of Agriculture International Students Association established a \$500 annual bursary called The Zhuhui Ye Memorial Award. The first bursary was awarded this past fall.

Liu hopes the award will further the understanding of culture and relationship between Chinese and Canadian students. A number of students from China's Fujian Agriculture and Forestry University (FAFU) study on the Agricultural Campus each year as part of the FAFU 2+2 program.

The bursary recipient must be enrolled in the Faculty of Agriculture, in strong academic standing and in financial need. They must also be either a Chinese student enrolled in the FAFU program or demonstrate a commitment to the program.

Liu — who also goes by "Mike" — is now in his second year of



Fellow students in the Faculty of Agriculture International Students Association have established an annual bursary in memory of aquaculture grad student Zhuhui Ye.

graduate studies and spent one year as President of the Dal Agriculture International Students Association (ISA).

"This is such an excellent school and all of the students become like a family," says Liu.

Shortly after the accident, Liu and his friends organized a fundraising event at St. David's

Church in Bible Hill. The evening featured authentic Chinese food and entertainment and they raised nearly \$2,000 to establish the memorial fund.

"We had a huge team of people working in the kitchen — cooking and washing dishes — and we had people delivering the food and entertaining the guests," says Liu. "We also did a presentation, telling people in the community about Zhuhui and asking for donations."

Proceeds from the ISA's annual talent show and Chinese New Year celebration also went towards the scholarship.

Liu describes Zhuhui as a loyal friend who was always helping other students with schoolwork, or organizing group get-togethers

"I want to make sure he's always remembered and — at the same time — help students from China who are coming to school here," says Liu.

"He will never be forgotten." —Heather Laura Clarke

This is Agriculture: Faculty of Agriculture launches its first strategic plan





It's Wasundara Fernando, a master's science student in Dal's Faculty of Agriculture, who is studying apple peels and fish oil components to determine their potential as breast cancer treatments. Her supervisor, Vasantha Rupasinghe, associate professor and Canada Research Chair in Fruit Bioactives and Bioproducts, has been investigating the disease fighting power of cool climate fruits such as apples with the aim of developing natural health products to prevent and treat chronic diseases.

It's Sarah Stewart-Clark, assistant professor of shellfish aquaculture, who is using the most innovative science to support one of Atlantic Canada's most traditional industries: shellfishing. Dr. Stewart-Clark and her team are creating diagnostic tests to identify species of marine weeds that adversely impact our oceans and shellfish, work that benefits the shellfish industry while also helping to protect the natural beauty of our beaches and waters.

It's Chris Cutler, associate professor of environmental science, whose team is developing ways to improve plant health, better manage insect populations and protect the environment by re-



ducing the amount of chemicals used. In particular, Dr. Cutler and his team are closely examining the effects of pesticides on bees that pollinate crops and trying to understand how to increase populations of insects that help, not harm, agriculture.

Agriculture is at the heart of healthy, abundant and sustainable communities. This is Agriculture and this is Dalhousie's Faculty of Agriculture.

Inside the plan

The newest of Dalhousie's 12 faculties, joining the university through the merger with NSAC in 2012, the Faculty of Agriculture recently launched its first strategic plan under the leadership of David Gray, its first long-term dean and principal of the Dalhousie Agricultural Campus.

Aptly titled "This is Agriculture," the strategic plan will be used by the Faculty to encourage people to shelve their stereotypes of agriculture and to be open to a new vision.

"In my role as Dean of the Faculty, people often ask, 'What is agriculture?" says Dr. Gray. "Almost immediately my mind takes

me to the range of teaching and research on this campus that is redefining our relationships with our landscapes, our oceans, our food sources and even our healthcare systems."

Over the next five years, the Faculty of Agriculture is committed to peeling back the layers of this question and showing the breadth and scope of agricultural teaching and research happening in Truro.

Researchers at the Faculty of Agriculture are pushing the boundaries of the industry. From exploring compounds of apple peels for breast cancer treatments to one-of-a-kind blueberry harvesting technology, Dal's Faculty of Agriculture is researchintensive, attracting more than \$10 million in research funding annually.

As one of its key goals under Research and Knowledge, the Faculty will be looking into other areas of research by building new and growing existing partnerships with other Faculties with-



in Dalhousie and through its other international academic and industry connections.

Underlying its other goals, Community Engagement, Regional Leadership & Impact, Management and Governance, and Teaching and Training, is a three-fold promise. This promise, along with the plan's mission, vision and purpose statements, will guide the next five years of activity on the Agricultural Campus. It's focused on fostering an environment of teaching and learning excellence, creating a hub

of world-leading research and innovation, and facilitating opportunities for students, staff and faculty to connect with and service local, national and global communities.

Considering the past and the future

The plan sets a path for the future, but it doesn't lose sight of the history that is embedded within the Agricultural Campus. "We're lucky," says Dr. Gray. "We're very lucky to be able to work on such a stunning campus. For close to 100 years, we have built an international reputation on being a unique and friendly campus community and we plan on preserving the unique nature of studying and working here in Truro well into the future."

The Faculty plans to widen its community along with its goals and commitments over the next five years. To be part of this new vision, follow the conversation using the hashtag, #thisisagriculture on Twitter. You can also learn more about activities and events on the Faculty's Facebook page.

Atlantic Canada Cancer Research Conference

Niroshaa Arumuggam is a first year M.Sc. student of the Department of Environmental Sciences at the Agricultural Campus who investigates the anticancer properties of a new drug candidate synthesized from natural biomolecules of apple and fish oil.



Dr. Gerry Johnston, Associate Dean in Research of the Faculty Medicine, Niroshaa Arumuggam, and Dr. Michael Johnston, Director of BHCRI.

Niroshaa was surprised when Dr. Micheal Johnston, Director of Beatrice Hunter Cancer Research Institute announced that she had won the first place Award for her presentation at its Atlantic Canadian conference in Halifax.

Niroshaa's presentation was on "Cytotoxic effects of phloridzin docosahaenoate on chronic myeloid leukemia K562 cells". Niroshaa is a member of Fruit Bioactives and Bioproducts laboratory under the supervision of Dr. Vasantha Rupasinghe, Canada Research Chair in Fruit Bioactives & Bioproducts and her research is funded by the Discovery Grant Research Program of the NSERC.

International Year of Family Farming

In 2014 the Agricultural Campus celebrated the International Year of Family Farming by featuring one alumni family farm each month. Many of these were published in our July edition of the Agricola News. We are pleased to share more of these features with you in this edition.



Haveracres Maple Farm Antigonish, NS Jason (Class of '98) & Nicole (Class of '97) Haverkort

A clock is no real indicator of when to go to work. A calendar helps only a little. But when you feel the icy chill of winter letting go, tempting you to ditch the heavy winter parka in the afternoon sun, yet leaving you still bundled up with cozy blankets in the night, he knows it's time.

It's time for Jason Haverkort to head to the sugar woods and turn the taps on.

"When we first started we had 1,600, but now have 12,000 taps," says Jason, "so when the season starts, we're flat out to the end."

Maple season may be sweet, but it's short and unpredictable. "Our season typically takes place between early March and late April and lasts about four to six weeks."

When nights are still cold, water from the soil is absorbed into the maple tree and during the day, warmer temperatures create pressure which pushes the water back down to the bottom of the tree. The result? Clear sap, which is lightly sweet and has the consistency of spring water. It's ready to be turned into syrup.

"Only mature maple trees are tapped," explains Jason. "Meaning the tree must be 30 to 40 years of age." Once at a mature age, the trees may produce sap for 100 years or more.

"Each season, the trees are tapped in a slightly different spot than the previous year," he adds. This preserves the health of the tree and enforces sustainable growth. Tapping does not affect the growth of the trees.

At Haveracres Maple Farm, a vacuum tubing system is used to collect the sap, as opposed to the traditional bucket system. This greatly reduces the labour, plus creates a more sanitary environment for the collection process. Over 35 miles of blue tubing connects the thousands of taps, spread-out over Jason's 125-acre operation (he has another 125 acres with silviculture work being done). The blue tubing feeds into nearly six miles of black mainline tubing, which is on an incline, allowing the sap to run downhill, into the camp.

The use of reverse osmosis concentrates the sap's sugar three or four times, by separating water from the sugar molecules at high pressure. This removes up to 70 per cent of the water from the sap prior to entering the evaporator and saves on time by

speeding up the concentrating process.

Once the sap has been through this process, Jason boils it down, resulting in the maple flavor we crave for our pancakes. It takes about 40 liters of sap to make just one liter of maple syrup. During this process, the excess water is removed from the sap and nothing is added. The sap (two percent sugar when it leaves the tree) is fed by pipes from the storage tank to the evaporator. As it boils, the water evaporates and the sap becomes denser and sweeter. It is boiled until it reaches 66 percent sugar. This now maple syrup is ready to be packaged.

While Jason does a lot of packaging at the end of each season, he puts some of his 1000 - 1500 gallons of syrup in stainless steel drums. Throughout the year, when product is running low, Jason will take the syrup from the drums and replenish his stash of jugs and bottles.



A maple syrup producer since 1999, Jason and his family produce high quality syrup available in a variety of sizes from 100 ml to four liters. They also produce maple butter. Haveracres Maple products are sold in Sobeys locations from Port Hawkesbury to Truro, various Farmers Markets and local stores.

"Selling our product at the local Farmers Markets and meeting the customers gives me a lot of pride," says Jason. "It's nice to talk to the people buying our product and to see returning customers."

No stranger to the lifestyle, Jason grew-up on a farm (first dairy and then beef) and headed to NSAC. "I always said farming was what I wanted to do. I had an interest in maple. I left the AC and started the operation."

Nicole, who also works outside the home, helps Jason when she can during sap season, "I come down to keep him company," she laughs.

Their two daughters, Jessica (nine) and Juliana (12) often accompany him on Saturday mornings to the Farmers Market. "They also like to help with the bottling," adds Nicole.

"It's great to have the family working together," says Jason. "Seeing how food is made, makes the girls appreciate things more."

Extended family also step-in to help when necessary. "Jason's uncle is here almost every night when we're boiling," says Nicole, adding his parents also help a lot.

Of course, Jason doesn't sit around the other 46-48 weeks of

the year, twiddling his thumbs until the weather turns. There's ample work to be done on the sugar farm year-round. Tap lines are constantly examined and mended when necessary. And just after each season, the lines are thoroughly cleaned. There's also the 10-12 cord of wood needed to keep the sap boiling on the wood fired evaporator inside the camp. During the summer months, Jason grows pumpkins to also sell at the Farmers Market in the fall.

Building the operation from scratch, Jason has invested a lot of time and energy. "You see a lot of abandoned farms around here, I've invested so much in our place, I sure hope it doesn't become one of them," says Jason. "As for the future, I hope the next generation keeps it going."

Mark's Market Chris Oram (Class of '12) and Richard Oram (Class of '78)

Despite growing up on a farm, as a teenager Chris Oram (Class of '12), didn't like farming.

Yet at 24 years old, he is in the process of gaining ownership of the family farm from his father, Richard Oram (Class of '78).

And he loves every minute of it.

For Chris, taking over the farm is his proudest moment and he couldn't have done it without the help, support and a little push, from his family.



Located in Wooddale, Newfoundland, the Oram's farm is not a typical farm for the rocky province. In Newfoundland, or "the Rock," rich soil for growing luscious vegetables is a rare find. That doesn't stop the Oram's. They own and operate a 56 acre vegetable farm called Mark's Market.

Mark's Market produces a wide variety of vegetables that are not typically grown in Newfoundland. From the typical carrots and potatoes, to not-so-typical watermelon, cantaloupe and broccoli, Mark's Market has something for everyone. Their ability to adapt to what their customers want is what sets them apart from other vegetable farms in the province.

"We are able to adapt to what people want," Chris says. "For example, kale is becoming very popular because of its health ben-

efits. So this year we're growing kale."

Newfoundland is home to about 30 other vegetable farms but none are quite like Mark's Market. With an hour radius around them that hosts no other farm markets, Mark's Market has customers that come from as far as two hours away. Their wide variety of unique vegetables is a huge draw for customers.



"Other farms in Newfoundland sell mostly traditional vegetables like cabbage, turnip and carrots," Chris explains. "We grow and sell many different things. If our customers are looking for something we don't have, we can try it the next year."

Chris grew up with a love for basketball and a dislike for farming. As a teenager, he often argued with his father when asked to work on the family farm. He admits that as a child he wanted nothing to do with it but over time, the family farm began to grow on him. It was the Dalhousie Agricultural Campus (formerly Nova Scotia Agricultural College) that really changed his mind once and for all.

"I chose the AC partly because I was thinking about taking over the farm and partly because of basketball," Chris explains. "Once I got there I realized how important farming really is. Being at the AC really made me proud to be a farmer. That's when I knew I wanted to follow in my father's footsteps."

The family farm was initially started by Richard 28 years ago. He began growing and selling vegetables as a side job with the intention of helping his children get through university. It has since grown and is now a full time operation. Mark's Market sells their vegetables right off their property to people in their community and beyond. Open evenings and weekends, they operate a farmers market right from the grounds.

For the Oram family, having a positive impact on all of central Newfoundland is their ultimate goal. Community support is very important to the Oram family. They educate the community through school presentations as well as activities on their farm.

"We want to show people where their food comes from," Chris says. "It doesn't just come from the grocery store. We want to educate the public and our community on exactly how their food is grown."

The farm acts as a source of income for Chris and his family but to Chris, it's more than that. Being able to farm with his family means a lot.

Chris's partner, Kayla Arsenault (also Class of '11), whom he met while attending classes at NSAC, is also proud to contribute to the success of the operation. On a daily basis, Kayla works alongside Chris, his father and mother, Arlene, helping to growing the busi-

ness.

"Family farming is a unique experience with unique opportunities," Chris explains. "Growing up on the farm allowed me to work at home with my family. It taught me discipline and hard work, something that I might have not learned so well somewhere else." Although it is a lot of fun, for Chris running the farm isn't all fun and games. He says that he wouldn't have been able to take over the business without the help from his family.



"Having the guidance from my father was very helpful," Chris explains. "If you've never farmed before, it can be overwhelming to jump right in. It's important to be open minded and be open to new ideas. If you can't adapt to all of the changes around you then you won't be as successful. It's not as simple as just planting a few seeds!"

Chris takes pride in the operation that his father started all those years ago. At the young age of 24, Chris has lots of time to continue to develop what his father started. It took Chris some time to realize just how important family farming is to him, but he's glad he finally realized it.

D & E Pork Inc. Patrick & Lisa (Deveau) Murray (both Class of '09)



From the moment he was able to walk, the only thing Patrick Murray wanted to do was go to the barn with his father.



From raising hogs to harvesting potatoes and all of the hard work in between, Patrick Murray (Class of '09) enjoys it all. Growing up as the second oldest in a family of five, Patrick has always maintained a love for his family and the farm. Now in the process of gaining ownership from his father, both he and his wife, Lisa (Class of '09), work on the farm. For them, there is no better place to raise their family.

Located in Albany, PEI, the Murray's farm, D & E Pork Inc., specializes in hog and potato farming. With 1,250 sow and many acres of crop land, D & E Pork Inc. consider themselves a mixed farming operation, something that sets them apart from the 21 other hog farms on the island.

"We have approximately 2,000 acres of crops, including corn, barley, wheat and processing potatoes," Lisa explains. "Our farrow to finish operation and the crops go hand-in-hand with each other which make us unique from other hog farms. Without the two, our farm would likely be a lot less cost efficient."

D & E Pork Inc. was established in 1982 by Patrick's father, Dale. Moving back to PEI from Ontario, Dale decided to begin raising a few hogs.

Dale's wife, Earlene worked full-time but helped out on the small farming operation whenever she could. Over time, the farm expanded and gradually increased until it became a farrow to finish operation. When a tragic farming accident took the life of Dale's brother, Dale purchased the potato farm that his brother had owned and operated. With the help of his wife and five children, they turned his small hobby hog farm into a full-time hog and po-

tato operation.

"We are now a full-time farrow to finish hog farm," Lisa explains. "We raise the hogs from birth as piglets until they are large enough for the market. We currently have 12 full-time workers, two part-time and five seasonal workers."

Patrick met his wife Lisa during his time at NSAC. Shortly after graduating, both with a Bachelor of Science majoring in Agricultural Business, Patrick and Lisa moved back to Albany, PEI to start their family. Lisa joined Patrick's mother working in the office of the farm. She helps Earlene maintain the records for the sows, conduct the payroll and distributing and paying bills- all things that are very important to any farming operation. Patrick joined his father working on the farm, caring for the hogs, maintaining the crops and other farming duties.

"The opportunity to join my father on the farm was right in front of me as soon as I graduated from the NSAC," Patrick explains. "I grabbed it right away and not once have I second guessed my decision. It was a no-brainer for Lisa and I."

Like any farm, there is no such thing as a typical day. Although the hogs are fed every morning by an automated system, Patrick and Dale head to the barn around 5 a.m. to check on the feed systems and make sure everything is working properly. Duties after that could range from being in the barn caring for the animals or being in the field caring for the crops. May and October are their busiest times of the year with getting the crops in the ground and harvesting in the fall.

"You typically won't expect to see Dale or Patrick in for lunch or supper during those busy times," Lisa explains. "If you'd like to see them, you'd better head on out to the field and hop in the tractor for a few rounds!"

As a family farm, D & E Pork Inc. is very considerate of the surrounding community. They strive to maintain a peaceful presence and to not disturb their neighbors.

"We try to pay great attention to our neighbors," Lisa explains. "We make sure to work in the manure as soon as we spread it to reduce the smell. We try not to operate the tractors early in the morning or late at night to reduce noise. We hope that by taking these precautions will help us to maintain a

these precautions will help us to maintain a healthy relationship with our community and neighbors. It's important to us for them to see that we care."

It's not hard to tell that Patrick and Lisa truly value their family. Although Patrick has four other siblings, he is the only one who still works on the farm. Growing up, all of the Murray's pitched in a great deal but have since moved on and have pursued other careers. Patrick's eldest sister Amanda lives in Alberta with her



husband and two children where she is a teacher. Patrick's brother Nathan, (Class of '11) lives in Regina where he works for Farm Credit Canada. His other sister, Kaitlyn, has recently accepted a job as a nurse in Summerside, PEI and Patrick's youngest sister, Whitney, is entering her second year of the arts program at the University of Prince Edward Island.

Patrick feels very fortunate to have been born and raised on the family farm. He knows the importance of hard work, determination and working together with your family. Although the farming lifestyle has many ups and downs and is not always easy, the benefits and satisfaction of working on the farm with his family make it worth it.

"It's definitely challenging to never know what the markets are going to do or if the weather is going to affect the crop this year," Patrick says. "But waking up every morning knowing that you are going to be doing what you love makes it totally worth it."

Both Patrick and Lisa take pride in what Patrick's father established for their family. Knowing that he took the first step on his own and worked hard to provide for his family fills them with a sense of pride. Now it is Patrick's turn to work hard and raise a family, teaching them the values and importance of hard work and working with your family. As the arrival of their second child draws near, it is an understatement to say that working on their family hog and potato farm, Patrick and Lisa Murray are happier than pigs in mud.

Burns Poultry Farm Freetown, PEI

Nathan (Class of '99) and Wendy (Class of '97) Burns "If you like it, don't do it"

"If you truly love it, do it."

That's the advice given by both Nathan and Wendy (Hollis) Burns, to anyone considering a farming lifestyle.

Together with their four children, Nathan and Wendy are seventh generation poultry farmers in Freetown, PEI. Burns Poultry Farm supplies high quality fresh eggs to Prince Edward Island and beyond. And they love it.



Their advice doesn't come at a dull time either. Finishing touches are just being done on the Burns' new state-of-the-art barn, a fully enriched colony housing system for hens. This facility is the first of its kind in North America. The concepts and amenities in the barn adhere to the most progressive European standards for the humane treatment of egg-laying hens.

"Unlike conventional housing, the new system caters to the natural instincts of the hens," says Nathan.

The hens are housed in multiple levels of spacious colonies. This allows them to socialize, flap their wings and move around. In addition to extra space, the EU standards include requirements for enrichments, such as scratching and pecking pads, privacy curtains in the nesting area, perch space and unlimited access to food and water. Another feature to allow for a more natural envi-



ronment is specialized lighting that is dimmed to simulate sunrise and sunset each day.

Over 13,000 birds were moved into the new system in July and according to Nathan and Wendy, they are loving it.

"The morning after we moved the hens in I came out to the barn, unsure of what I might see," says Wendy. "But the birds were perching, scratching and even laying eggs in the nest boxes! I was so excited." The birds have been thriving ever since.

With a few cosmetics left to officially complete the barn, the Burns' renovations will permit visitors and tour groups to actually get a glimpse of the hens in their habitat.

"There's a big misconception out there, it seems that because hens are housed in a bio-secure space, which is not open to the general public, some think that poultry farmers must be doing

something wrong or bad," says Nathan about the myth. The new barn is equipped with numerous windows in the egg collection lobby, so visitors can see the happy hens for themselves.

With the barn full of flourishing hens, the Burns' are scheduled to renovate a second layer barn in January. Although this building currently exceeds Canadian regulations for hen density, Nathan and Wendy will bring the second barn in alignment with EU standards for fully enriched colony housing, like the newly renovated barn.

The extensive barn renovations aren't the only upgrades Nathan and Wendy have undertaken in their time as farm owners. They've renovated their federally inspected egg grading station, installed a computerized egg grader, which results in many efficiencies. They expanded production by purchasing more quota in



2006, which called for the construction of a brand-new barn.

They've also up-graded their water treatment system. "The chickens drink better water than I do," laughs Wendy when she talks of the filtered, softened and ozonated water the hens consume.

The Burns' have also installed an on-site grain dryer and elevator, an asset to their cash crops.

While it's all been a huge investment for Nathan and Wendy, it's completely worth it.

"We are always looking into the future," says Wendy. "We like to think we're also investing in our children. We've been here for seven generations, hopefully there will be many more."

Both growing up on farms, the concept of farming wasn't strange to Nathan or Wendy. Nor was the idea of becoming the

seventh generation of Burns to farm in Freetown. Since purchasing the farm from his parents, Donald (Class of '62) and Lorna, in 2001, Nathan and Wendy haven't had much time to look back and reflect. They've concentrated on growing, increasing efficiencies and adapting to the newest technology.

"Farming is our lifestyle," says Wendy. "We get to work together every day and we approach everything as a family.

Two days per week the Burns' grade eggs for fresh market. The kids are 'eggs'perts when it comes to grading and don't mind pitching-in to help. Nathan and Wendy's third child, Mitchell (nine), specializes in packing the jumbo eggs, while Kendall (10) likes packing extra-large. The girls, Mallory (12) and Shelby (seven), like to help stamp boxes and organize cartons. And all of the children love to help with the chicks!

The graded eggs are picked-up by ADL Foods and distributed to Co-op stores, restaurants, retail stores and more. Burns Poultry Farm is the sole supplier of fresh eggs to ADL Foods, a partner-ship that speaks to the success of Nathan and Wendy. They were awarded ADL Foods Supplier of the Year for 2013.

"We want to provide fresh nutritious eggs to our customers. We support local business, as they support us," says Wendy.

Impact on the community is important to Nathan and Wendy. In addition to the family helping-out, Burns Poultry Farm employs three full-time staff year round, as well as six, or more, part-time staff, to help on grading days.

"We want to provide meaningful employment to members of our community."

The majority of Nathan and Wendy's staff are hired through Community Connections in Summerside. The non-profit organization provides employment and support services to adults with intellectual disabilities.

"We have the best employees," says Wendy, adding their work ethic is as if they were family members. "They come in everyday with such a positive attitude. They are passionate about their work and so happy to help."

At the end of the day, it's no wonder Nathan and Wendy are so proud of their farm and family operation.

"Do your best each day, that's what we strive for," she adds. The Burns' family are doing just that.

MacLeod Agronomics Cedric MacLeod (Class of '99)

Cedric MacLeod has a disease. There is no cure. But his spirits are high and he feels great. His disease is feeding families across New Brunswick, in a sustainable way, both at their own kitchen tables and in a variety of restaurants. He couldn't be more proud of his disease – farming.

"A former NSAC classmate once described farming as an incurable disease," says Cedric. With a deep-rooted passion for agriculture Cedric couldn't agree more. "I didn't chose farming, it's embedded in me, in my heart."

Cedric pours his heart and soul into his 105 acre beef operation in Carleton County, NB, Local Valley Beef (LVB), selling naturally produced grass fed black angus beef.

Based on consumer demand, the beef is direct-marketed to local restaurants and customers in 25, 50, 100 and 200 pound as-

sorted cut packages. "Some restaurants will order an entire animal, while a family of four can purchase just enough without having to worry about dealing with half-of-a-cow," says Cedric. "An average family can easily get through 25 pounds and a few months later, come back for more."



One LVB cow amounts to 16- 25 pound packages. With 25 cows sold each year, LVB is providing local, sustainable, healthy and delicious meals to hundreds of residents across New Brunswick.

Why can Cedric market his beef as sustainable? His production methods.

A few years ago, Cedric installed a deepwell and solar powered pumping system for the cattle. Allowing the animals to have unrestricted access to clean drinking water at all times.

"This watering system also allows us to keep cattle on pasture year-round. Our pastures are rotationally grazed to maximize the production of top quality forage that produces top-quality beef."

LVB cattle remain on pasture all year long, as opposed to being fed grain. Research has shown that grass-fattened cattle produce a lean beef with enhanced flavor, OMEGA-3 fatty acids, CLAs and anti-oxidants. As a result, the cattle must have a never-ending supply of fresh grass. Cattle in the "finishing stage", 20 – 24 months of age (nearing slaughter time), must be moved to fresh pasture each day and every three-days for the cows and calves.

"Instead of big equipment and feed storage infrastructure, we have lots of fences, as well as lots and lots of fence maintenance," he laughs.

By following these processes, LVB is helping our environment. "Grass-fed allows us to use a lot of clover and alfalfa in our pastures but these plants also scavenge nitrogen from the atmosphere and make it available to other plants in the pasture," says Cedric. In turn, nitrogen fertilizers are unnecessary.

The ways in which LVB are minimizing their carbon footprint doesn't stop there. Just as the water pump runs by solar, as does the fencing system spanning the property. "We are an off-grid farm," he adds.

Cedric also feeds hay and silage on the pasture where cows will graze the following season. Manure nutrients are deposited where they are needed and spread evenly across the pasture area.

"We don't have to start the tractor in the spring to spread manure and we get the best use of our manure nutrients possible, again reducing the need for energy intensive fertilizer inputs," adds Cedric.

Although he didn't grow-up on a traditional farm, Cedric loved animals and with his father in the construction business he often accompanied his dad when working on agricultural construction sites. "My dad often talked about my grandfather, who was in WWII, he knew the importance of food security, so always had a few animals of his own. That really stuck with me."

After high school, Cedric headed to NSAC, enrolling in pre-veterinary medicine. Yet during his first year, IN101: Introduction to Agriculture changed his world. One particular day the instructor showed videos and slides on soil erosion.

"That really spoke to me," he adds. "I was seeing that happening in my hometown." Cedric realized agronomy is where he needed to be. He immediately set his sights on soil conservation and soil health.



And that's precisely where he has landed. When not mending fences, improving his operation, or selling product for LVB, Cedric runs an agricultural advisory business full-time, MacLeod Agronomics. Here he thrives, specializing in international greenhouse gas and renewable energy projects, working one-on-one with growers. His goal? To decrease the environmental footprint of Canadian agriculture, at a profit to its farmers.

Cedric is living and breathing his disease. He is VP of his local Chamber of Commerce, serves as manager for the NB Young Farmers and is president for the NB Cattle Producers.

Cedric credits his community as his driving force. "Being a player in your community is fundamental." He says his community plays a big role in why his farm gives him so much pride. "My community has really responded to my operation."

Although farming is clearly his passion, Cedric is quick to advise newcomers to the lifestyle, that passion isn't enough. "You cannot let your love for the farm be the only thing that keeps you there. A core focus on profitability is needed for long-term success in business. Run your farm by the numbers, always."

J & M Reeves Christmas Greens Ltd.

Matthew Reeves (Class of '03)

It may not be an age-old debate, but these days it's certainly a popular one. Every year when December rolls around, households ask the question: should we put up a real Christmas tree or an artificial one?

In Matthew Reeves' (Class of '03) home there is no question. For the past five years Matthew and his father, John, have been operating J & M Reeves Christmas Greens in Lunenburg County. Although they aren't really new to the industry. The Reeves family has been producing and shipping Christmas trees to Canadian and international markets since the very inception of the industry.

"My grandfather started harvesting wild trees in the 50's," said Matthew. "He had customers in New York. After he passed away, my father and I wanted to keep that going."

"We want our farming operation to have a positive impact on our community," says Matthew. "We want to be good citizens, good neighbours and provide employment to the community."

Tree season employs numerous residents making the wreaths as well as six to eight labourers in the woods. And because the Christmas tree business isn't as simple as harvesting trees each Christmas season, J & M Reeves have two full-time seasonal workers.

"It all really begins in April," says Matthew. "We start by spreading fertilizer and under bushing the trees. Around July we begin summer shearing, which continues on to harvest season." Matthew, John and their employees start cutting brush for wreaths in October. All the work is done by hand. They also begin tagging. That's when the extended family steps-in. "My niece likes to help tag the trees."

Tagging involves accessing and marking trees that will be cut that particular season. A coloured ribbon is placed on each of these trees. There are three colours of ribbon, each colour representing a different grade for the tree. The tags also act as a counting and tracking system.



In 2009 Matthew and his father bought a piece of land and over the past few years, have continued to grow. They now produce various sizes and grades of Nova Scotia balsam fir trees on 400 acres.

"The majority of our trees are wholesaled directly to New York and New Jersey, as well as some Canadian brokers," says Matthew. Although some of their trees are sold at small local retail shops. In addition to trees, J & M Reeves also supply wreaths.

In total, 8-10,000 trees are cut annually from the Reeves property. Complementing that, 3-4,000 wreaths are hand-made for J & M Reeves Christmas Greens at the homes of local residents.

Finally in November it's all hands-on deck. Matthew, who works full-time for the Royal Bank of Canada, in Halifax, takes two weeks of vacation and heads to the woods for the most labour intensive part. Matthew's brother and sister also join the crew when they are available.

"Cutting takes about three weeks," he says. As the trees are cut, they are put through a baler, which wraps the trees in baler twine, so the trees are not damaged. They are then gathered by tractor and loaded on into large containers. Once a trailer is full, they are picked up by an 18-wheeler and sent to their destination. The trees are then ready to be purchased and become a part of very

special family traditions.

"That's definitely what gives me the most pride," Matthew says. "Seeing the truck loaded with good trees, heading to the US or somewhere in Canada. It makes us feel like we've done a good job."

And contrary to some beliefs, those in the Christmas industry in NS really are doing a good job all around.

What many consumers don't realize about real trees is not only are they beautiful, fragrant and natural, but they are environmentally friendly as well. The Christmas tree industry is completely sustainable and is in no way contributing to deforestation. Trees are renewable, reusable and biodegradable and never end up in a landfill at the end of their lifetime.



Matthew and his family operation are one of many in Nova Scotia contributing to this huge industry. Nova Scotia has roughly 1200 families producing an estimated 1.3 million balsam fir Christmas trees on 30,000 acres of land.

"We believe in providing outstanding customer service, producing trees of exceptional quality and continuing to grow the industry and our business through the use of sustainable harvesting practices," says Matthew.

And that they do.

If you haven't before, J & M Reeves hope you will consider a real tree as part of your family tradition this Christmas season.

To find a choose and cut or retail lot in your area, visit the Christmas Tree Council of Nova Scotia online at iloverealtrees.com

Elaine Froese on Campus: Succession Planning Hits Home

Elaine Froese, farm family coach and award-winning author from Manitoba, visited campus on November 5th and 6th to speak with students and producers about farm succession planning, communication and farm family dynamics.

This event was made possible through collaboration between Extended Learning and the Dalhousie Agricultural Students' Association. Sponsorship included many agricultural and business organizations and featured major contributions from the Class of '44 Guest Speaker Fund and Farm Credit Canada.

November 5th focused on a student presentation and workshop. The event was very well-received and allowed students the opportunity to hear about other farm family situations, as well as discuss current frustrations felt within the industry and on the farm. Elaine provided practical tools to help facilitate tough discussions, coordinate family finances and improve communication on the farm.

Elaine emphasized that graduates of the Dalhousie Agricultural Campus will have many opportunities within the agricultural industry. She encouraged students to find their niche and ensure they are happy and secure in their farming situation.

Overall, the event addressed problems at the heart of farm family succession and enlightened students on methods to deal with communication.



Elaine Froese and Robyn McCallum, President Dalhousie Agricultural Students Association

November 6th was all about the general public and producers. Elaine kick-started the day with a session open to the public. She focused on "The cost of inaction" and how important this topic was to our regional economy. She also spoke to "The In-Law Factor", her new book and stressed the importance for family meetings, on-farm communication 'letting go'.

Elaine shared some of her experiences with students from the previous day with producers. She noted that the younger generation is concerned that they will not be respected for their new ideas and are dealing with the fear of failure.

Elaine encouraged producers to be open to succession planning and to welcome the next generation of farmers.

Elaine opened lines of communication on campus and started the much-needed conversations surrounding farm succession. Students and producers benefited from her expertise and insight.

Events & Reunions

Blue & Gold Awards 2014

The Blue and Gold Awards program honours alumni who have distinguished themselves through outstanding service to the alma mater, their communities, the Province of Nova Scotia and beyond.

The 2014 awards gala recognized three deserving alumni for their exceptional achievements in the areas of volunteerism and contribution to the agricultural industry.

Philip Keddy (Class of '06) Young Alumni Achievement Award

Since graduating from NSAC, Philip has been working alongside his parents, Charles and Doris, managing their family operation, in the Annapolis Valley. Although the farm was built on strawberries and raspberries Philip saw an opportunity and accepted the risks and challenges.



He converted ¼ acre of family farm land into a test site for sweet potatoes for a local agricultural research facility. Seven years later, he has grown the sweet potato test site into one of the few commercial sweet potato farms in Atlantic Canada. Now spanning 28 acres, the sweet potatoes have taken off.

Of course, it hasn't always been blue skies and sunshine. Sweet potatoes are labor-intensive and need special care in Atlantic Canada. The past few years have had their high points and low points, full of trial and error, including the loss of a full crop due to improper storage. Philip has maintained a positive outlook and persevered.

Philip has served on the board of directors for the Young Farmers Forum of Nova Scotia for four years. For the past two, he's led the board as chairman. He also serves on the board of Farm Management Canada.



Peter Corey (Class of '01 & '12) Alumni Volunteer of the Year Award



A trip to the Congo and Mozambique several years ago inspired Peter to apply his knowledge and skills in aquaculture to alleviate poverty. Upon returning home, he immediately dedicated himself to this task. Fish for Hope, a volunteer initiative fueled and led by Peter, was born.

In just over two short years, Fish for Hope has helped revitalize hundreds of existing fish farming operations and inspired the start-up of new ones in the Democratic Republic

of the Congo. These operations bring much needed prosperity, improved food security and household income to thousands of people in the Equateur Province.

Through Fish for Hope, week-long training sessions educate fish farmers in the Democratic Republic of the Congo, many of them women. They use a portion of the harvest for their own consumption and sell the rest locally for cash that can be used to purchase health care, other food items, and pay school fees. Countless fish farmers have even received a \$25 tool subsidy (worth three to four hand tools) for pond improvement and expansion.

Peter's initiatives are also providing a full-time salary to a local who serves as the regional aquaculture coordinator for Fish for Hope in the Democratic Republic of the Congo.

Dr. Garth Coffin (Class of '60) Distinguished Alumni Award



Garth was appointed principal to NSAC during particularly hard financial times. Despite serious staff reductions and cut-backs in the provincial budget to the campus, at the beginning of his tenure, Dr. Coffin grew NSAC's budget significantly, to an extra \$1.5 million. This was a tremendous recovery from the original cut-backs.

Working at his original alma mater, Garth was a great supporter of athletic and artistic events on campus.

He was ever present at sporting events and tournaments held on campus and encouraged the formation of a drama society. Garth cared tremendously about the well-being of NSAC, its students and its employees.

His leadership and vision over his six-year tenure helped shape the reputation of NSAC and inspired a generation of students to broaden their view of the world through international development work and student exchange.

Garth appointed NSAC's first dean of internationalization. With this appointment, NSAC became highly recognized for its international involvement, a characteristic that is still evident on campus today. He introduced the External Relations office to NSAC by appointing the first executive director of Development and External Relations. During Garth's tenure, the value of all student scholarships awarded at NSAC tripled and research funding increased to 2.5 times larger than before he arrived.



Dean's Receptions 2014



Our annual Dean's Receptions were a great success again this year! We had a great time travelling the Maritimes with Dr. Gray, hosting alumni receptions in Antigonish, NS, Canning, NS, Charlottetown, PE and Sussex, NB. It's always great to see familiar faces, as well as to meet new ones.



At each event, Dr. Gray provided a campus update and answered many questions.

Stay tuned for dates and locations for our 2015 Dean's Receptions.



The Royal Agricultural Winter Fair



For the first time ever, an Agricultural Campus alumni reception was held at the Royal Winter Fair, in Toronto. Dr. Gray and the Ex-

ternal Relations office proudly hosted a number of alumni (and



Up-coming Events

Gander Alumni Reception

Hotel Gander February 3, 2015 7 p.m.

Farm Mechanization Show Alumni Reception

Moncton Coliseum March 5, 2015 7 p.m.

Community Open House

Agricultural Campus July 23, 2015

Class of '60 Reunion

PEI

July 24 – 26, 2015

Class of '75 Reunion

Agricultural Campus October 17 – 18, 2015

Save the Date!

Homecoming 2015 October 15 – 17, 2015

Round up your classmates and come back to campus to re-live the good 'ol days! Homecoming is a perfect time to hold your class reunion.



Class of '56 Reunion

In keeping with tradition, the Class of '56 met this past summer for their annual gathering. Class members, spouses and special guests enjoyed the three-days together in Cumberland Country, NS. Highlights included a tour of the local area, a visit to Joggins Fossil Museum and a class dinner, featuring guest speaker, Roger Bacon, former interim premier of NS.



Class of '74 Reunion

Members of the Class of '74 celebrated their 40th reunion this past summer. Classmates re-connected over dinner at a local restaurant. They also spent the next morning on the Agricultural Campus, enjoying breakfast in Jenkins Hall and touring the Engineering facilities.



Legacy ProjectShawn Taylor (Class of '94)

From campfire pokers, to belt buckles and weathervanes, the pieces coming from Shawn Taylor's (Class of '94) blacksmith operation, Brokkr Forge, are all one-of-a-kind. One of his latest custom pieces - a forged iron bench, commemorating the Nova Scotia Agricultural College.

After its official unveiling at the Blue & Gold Awards in early November, this spectacular, functional piece now lives behind Jenkins Hall, just off the Cobequid Trail.

The bench is the result of the Faculty of Agriculture, Alumni Association's "Legacy Project". "After the merger with Dalhousie University there was a lot of unknown and mixed emotions felt

by alumni," said Jean Lynds (Class of '90) and chair, Alumni Association, during the unveiling ceremony. "Now, two years into the merger, we are still the same great campus. To acknowledge and honour our NSAC roots, the Alumni Association board of directors committed to the Legacy Project." In the beginning, the board wasn't sure what this would look like. But Shawn and his work proved to be the answer.

Shawn creates many ironworks and art pieces utilizing mainly traditional blacksmith equipment, tools and techniques. While running Brokkr Forge from his home in Cen-

terville, NB for the past three years, Shawn has a long history working with metal.

"I did some fabricating and welding even before I attended NSAC." After being persuaded by friends to attend NSAC and earn his diploma in Engineering, Shawn returned home to PEI to work for many years, running a pest control and property management business.

Years later, life brought Shawn to NB and back to metal work. "About one-half of the work I do is custom, for clients," says Shawn, "either artistic or tools." The rest is displayed at galleries throughout NB."

After being approached by the Alumni Association and receiving minimal direction on the Legacy Project, Shawn went to work.

Knowing Shawn's connection and pride of being an NSAC alumnus - the Alumni Association was confident they were in good hands. "We didn't really know what to expect," said Jean. "But we were intrigued with the concept and the finished product far exceeded all expectations"

The six-foot structure is completely constructed of iron. What really catches your eye are its features, two barley stalks, cut out of the steel backrest and intended to represent the Barley Ring. The top of the swooping backrest represents both the swaying

wheat fields, as well as the handle of a walk-behind plow. Inlaid into the seat back is the former NSAC shield, in bronze. The wording "Nova Scotia Agricultural College 1905" has been cut-out of a seat rung.

"The entire bench has been sandblasted, primed and painted a natural iron color with automotive paint and then clear-coated," said Shawn. "This will resist weathering and rusting for many years." The bench has been constructed to withstand the tests of time and weather... much like agriculture.

"We know the bench will become a focal point for

many Convocation's and Barley Party's - not to mention alumni reunions, Homecoming and other campus gatherings," said Jean. "We truly are proud of this creation and especially proud that it has been crafted by Shawn - one of our own."

The funds for the project were committed from alumni during a previous Annual Appeal campaign for grounds initiatives. In addition to the Dalhousie Agricultural Students' Association, who also contributed to the project, Shawn graciously donated some of his time towards the end result.



Scholarship Banquet

Each year the Faculty of Agriculture Scholarship Banquet brings donors together with the students they support. In November, over 250 students and donors spent an evening together in celebration of student accomplishment and donor generosity. This event is an opportunity for donors of endowed and annual awards to learn more about the students receiving their award and likewise for students to get to know the individual, family, or organization providing their scholarship or bursary. On this night, students felt the impact of donor generosity and were recognized for their hard work and dedication to their education.



Dean's ScholarshipAssociate Dean, Dr. Claude Caldwell, Academic, with Huong Nguyen, recipiant

The Agricultural Campus has a long and proud tradition of student support. Over one-third of our students receive scholarship or bursary funding and the value of awards continues to rise. This year, seven new scholarships and bursaries were awarded for the first time, including the Paul C. Eaton Memorial Scholarship, the Clint McLean Memorial Scholarship, the Captain Steele Memorial Fellowship, the Atlantic Poultry Inc. Scholarship, the Faculty of Agriculture Mature Student Bursary, the Zhuhui Ye Memorial Award, and the Robert and Sheila Frame Scholarship for Maple Research.

This year's guest speaker was Don Bubar. Don and his sister, Carol Bubar (Class of '77), established the Dr. John Bubar Scholarship in 2010 to honour their father, Dr. John Bubar (Class of 1950) and former professor at NSAC. Don spoke to the impact of philanthropy and creating a culture of giving amongst donors and students. He also recognized the impact that university staff, faculty, and students are able to make within their community by giving of their time and talents.

Donors continue to provide impressive support to students. A number of new endowments will provide funding to students in the next few years and the annual appeal, phone campaign and annual gifts by donors strengthen existing awards and help to provide new funding opportunities for students. Every dollar that is gifted to awards at the Faculty reaches an AC student and can

be directed to any fund that is near and dear to a donor. The Faculty would like to thank all donors who have supported students and the campus with their gift.



Paul C. Eaton Memorial Scholarship *Karen Eaton, Hartley Prosser, Lindsey Jacobs*

The Alumni Family Bursary

Celebrating Future Generations of Agriculture Students

Agriculture alumni are a close-knit bunch – especially when it comes to family connections. Just ask Dwane Mellish, whose wife, brother, sister, sister-in-law, cousin, nephew and two nieces have all graduated from the Agricultural Campus.

As it turns out, the Agricultural Campus, is well-known for bringing in multiple generations from the same families. Reflecting on how agriculture families could support future generations, Mellish decided it would be nice to start a bursary that celebrated the sons, daughters, nieces, nephews, and grandchildren of alumni. The Alumni Family Bursary, which was launched in 2009, does just that.

Mellish graduated with a Degree Course Diploma in 1975, and fondly remembers the small class sizes and attentive instructors. When he and several other students travelled to the University of Guelph to continue their education, he says it quickly became clear that not every school offered such personalized attention.

"The students who had come from larger universities had that 'deer in the headlights' look," says Mellish. "But the classes were much easier for us, because we had such a strong foundation and were better prepared for that next step."



Back: Jean Lynds, chair, Alumni Association, Cory Cox, Marcus Robinson, Anthony MacDonell, Mitchell Brown, Dennis Rutledge Front: Robyn McCallum, Sarah Morse, Alana Bent, Natasha Cox Not in attendance: Cindy MacKenzie, Sawyer Olmstead

Mellish hopes that the Alumni Family Bursary will inspire plenty of other students to follow in their family's footsteps, as students from his own family have done. To date, the bursary fund has awarded close to \$60,000 to more than 75 students with familial connections to the campus. The bursaries of \$500, \$1,000, and \$1,500 are awarded to students who are related to a former graduate of the Nova Scotia Agricultural College or Dalhousie University's Faculty of Agriculture and who also excel academically and demonstrate financial need.

So far, they've raised more than \$85,000 for the fund through more than 600 individual gifts. These have been added to a previously existing alumni association fund and the Alumni Family Bursary now has a total of nearly \$270,000 –generating funds for approximately \$9,000 in awards each year.

"I've had the opportunity to sit with recipients and discuss their plans at our annual scholarship banquet. They're all so bright and articulate — which is wonderful, because they're the next generation of alumni," says Mellish. "We, as alumni, feel very good about being able to help them out as they work towards their goals." - Heather Laura Clarke

Joint FAFU Dalhousie Lab Officially Unveiled

On November 13, 2014 at the FAFU campus in Fuzhou, the Joint FAFU-Dalhousie Lab was unveiled by Dalhousie University President Dr. Richard Florizone, Provost and Vice President Dr. Carolyn Watters, FAFU President Dr. Siren Lan and Vice President Dr. Minsheng You.

The lab was built by Dr. Gefu Wang-Pruski, professor in the Department of Plant and Animal Sciences, who was appointed



by FAFU as Mingjiang Scholar. The lab is located in FAFU's College of Horticulture, focusing on vegetable production related research programs. The current team of researchers includes one associate professor, two Ph.D. research associates and three graduate students. The joint lab offers a base for research collaborations between FAFU and Dalhousie University where DAL faculty can work on research projects and graduate co-supervision.

Athletics Update

Eastlink Agri- Golf Classic - July 2014



A great event was held at Ken Wo in New Minas. Twenty-two teams lined up for golf, renewing of acquaintances and lots of laughs. The top alumni team was Seed Rite while the top team overall was Zoetis. Catch up on results with pictures at dal.ca/rams

Fall Sports

Rugby

With a young squad after the championship team of 2013-14, the women, did very well this fall. The improvement from day one was tremendous with the gap in losses being cut 50 per cent from the first encounter to the second league match. The Rams finished in 3rd and lost the semi-final to STU in Fredericton. The Rams placed three members on the All-Conference Team – Whitney Shaver, Jill Bent and Katie McQueen.



Hannah Arseneault crossing the finish at the DAL AC Competition

Cross Country

The Rams had another great season with both men's and women's teams finishing 2nd in the ACAA Championship. A highlight for the team was the performance of Hannah Arseneault, who went undefeated through all preliminary ACAA competition and again led the whole race finishing ahead of closest MTA runner by 50 seconds. As a result, Hannah was ACAA All-Conference and CCAA All-Canadian.

On the men's side, DAL AC's Oscar Moyles finished 3rd and was also an ACAA All-Conference.

Golf

DAL AC's women's team repeated as ACAA Champs outgunning the opposition by 46 strokes over two rounds on the Links of Crowbush Cove. Lindsay Cameron and Brette Holland repeated the win for DAL AC. Brette also finished second overall.



ACAA Golf Champs, Lindsay Cameron and Brette Holland

Soccer

The women continue to move up the standings under the direction of coaches Jackie Ryan and Melanie Hill. This year finishing in 5th and just missing a play-off spot, the team had great games against all competition, including the eventual finalists. All Conference for DAL AC were Emily Merks and Cora Sharp.

The men's squad also had their best year in a few, with great matches against all teams and defeating U Kings College and St Thomas. All Conference members were Chris Morash and Craig MacEachern.



Brette Holland taking the shot against UNBSJ to score

Fall and Winter Sports

Volleyball

The women had a great start to the year with a solid performance at the Tip-Off Tournament and then three wins in the first three ACAA League Games. Finishing the first semester with a 5-3 record in third place, the Rams are well positioned for a run at the title. The first competition of the new year will be in Quebec City, as they start the semester with a top notch tournament hosted by Cegep Limoilou.

Woodsmen

The Rams are finishing in 2nd or 3rd thus far in the 14-15 competitions and are also well-positioned for a run at the CILA title. Although relatively young, both the A and B teams are working hard and improving at each and every practice and competition. The MAC event is Jan 2, while the Rick Russell Competition is scheduled for Feb 7, 2015.

Badminton

The badminton team has participated in two events in the first semester – Scott Invitational and the first ACAA Competition in USA. The Rams finished 2nd in the USA event behind MTA. The second semester will see the RAMS compete in three more events before championships on Feb 21 and 22. Watch for the women's and mixed doubles challenge for an ACAA title.

Equestrian

The riders from DAL AC are "hands" above the rest in this year's AIEL competition. Two events hosted by DAL Halifax and StFX saw the Rams capture the championship with room to spare. Next semester's first event

is being hosted by DAL AC on January 18, 2015 at the MacMillan Show Centre.

Festive Craft Market

The annual market was again a success with 70 vendors and happy shoppers. Hosted by the Athletic Department in the Langille Athletic Centre, the proceeds from the market help support student-athlete bursaries and exhibition play for the Rams teams.

Rocky's Run

Formerly the Homecoming 5K was held again in October. With great RNS and community involvement, 86 runners competed on the DAL AC portion of the Cobequid Trail.

Follow the Rams:

Onlinedal.ca/rams
Facebook......Rocky DA' Ram
Twitter.....@dalacrams

Thank a Donor Week

The Agricultural Campus celebrated the generosity of donors and the impact they make on our campus in November. Many areas of campus, made possible through the gifts of time, talent, or financial support of our donors, were recognized with signs and bows. A large 'card' was also circulated around campus for students to sign, offering the opportunity to thank alumni and friends of the AC for the difference they make.

The annual Scholarship Banquet also took place during this time, celebrating our generous donors and the accomplishments of students. Donors from as far away as Ontario attended to meet the students they support and see first-hand the difference giving makes in the lives of our students.

To end the week, our first 'Thank a Donor Card Party', was held. Many students came together with development staff to prepare thank you notes for their donors.







In spring 2013, the provincial government announced the creation of the agricultural sandbox; a space to house and facilitate collaboration between students, industry, and academia as they combine their education, energy and ideas to solve problems for industry, create new opportunities and potentially new business ventures.

"It's a coming together of these three groups of people who are critical to economic development in our province," added Dr. David Gray, Dean of the Faculty of Agriculture. "The sandbox will be a space to create pathways and use existing resources that will move ideas into action. Offerings of the sandbox will include workshops, business plan competitions, guest speakers, mentorships and more."

The agricultural sandbox will be located at Dalhousie's Faculty of Agriculture and is a partnership between Dalhousie and Acadia University, two universities with campuses connected to rural communities and each with a focus on supporting and growing the agricultural economy of Nova Scotia.

In the fall of this year, the Faculty gave the sandbox its name, Cultiv8. Through idea generation, educational programming and facilitated networking, the Faculty, led by Sandbox Coordinator, Jolene MacEachern, will strive to cultivate its eight key pillars over the next two and a half years:

- 1) A remarkable student experience
- 2) Tomorrow's industry leaders
- 3) Campus entrepreneurial spirit
- 4) Strategic relationships
- 5) A culture of innovation
- 6) A regional entrepreneurial ecosystem
- 7) Viable business opportunities
- 8) Success

The sandbox will be established upon a strong base of successful existing programming and entrepreneurial resources at both universities. Programming opportunities continue to develop so check in often for updates. Reach out to jmaceachern@dal.ca if you are interested in learning more about our activities in the coming months and years. To check out the upcoming scheduled events, visit the website: www.dal. ca/cultiv8 or follow us on Twitter: @cultiv8ag

In Memory

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

William Ryan	1921
Delmar Vincent	1921
Douglas Yuill	1921
John Dewar	1921
Federick Perry	1921
Thomas Winter	
Bruce Coldwell	
Reginald Woodbury	1925
Charles Higgins	1925
John Desborough	
Earl Longmore	1926
Howard Trueman	1926
John Chisholm	1926
Angus McDonald	1926
Colin Rowe	1927
Ernest O'Brien	1928
Angus Chisholm	1929
Duncan MacPhee	1929
Maurice Lister	1930
Donald Knox	
Russell Weatherbee	1930
Edwin Northrup	1930
Clifton Richard	1930
Elmer Atwood	1930
John Fraser	1931
Leo Chisholm	1931
Cedic Kirkpatrick	
Murdock McSween	1931
Lloyd Hingley	1934
Harold Rogers	
Kenneth Siddall	
John James	
Archie Johnstone	
Arthur Scarlett	
Thomas Haliburton	
M. Isabel Archibald	
Roy Evans	
Donald Nicholson	
Edward Brown	1954
Timothy Johns-Churchill	
Peter Van Der Borch	
John Searle	
John Webster	
James Fraser	
Kenneth Smyth	
Hazel Burgoyne	
Kenn Munro	1992

Partnership with the Nova Scotia 4-H Council

The Faculty of Agriculture and the Nova Scotia 4-H Council have embarked upon a new partnership for the 2014/15 year. Many of our alumni were part of the 4-H family and we welcome your enthusiasm as we become more closely involved with the activity of our young 4-Hers.

The Faculty of Agriculture and the Nova Scotia 4-H Council share a commitment to offer top-tier education to its students and members. At the Faculty, it's our hope to heighten engagement and welcome more young people from across Atlantic Canada, Ontario and western Canada to our campus. As well, we, at the Faculty know that a goal of the 4-H Council is to enhance the image of 4-H with academic institutions in Nova Scotia by building new partnerships.

"It makes a lot of sense of us to more closely align with our 4-H partners. We see great opportunities to get in front of these young 4-Hers and enhancing their learning in agriculture by bringing in our alumni and faculty members to share the work they do and the excitement they bring to our industry," said David Gray, Dean of the Faculty of Agriculture.

We hope that you, our alumni, will keep an ear open and an eye out for opportunities to get involved as part of our partnership with 4-H. If you'd like more information on this partnership, please contact our Marketing Manager, Mary-Eleanor Power at mfpower@dal.ca.

At Home in Agriculture



Tamara Snook has found her home in agriculture.

Originally from Ontario, 19-year-old Tamara moved to small town Oxford, Nova Scotia and is fulfilling her dream of working with animals through the help of 4-H and Dalhousie University's Faculty of Agriculture.

Through 4-H, Tamara has pledged her head, heart, hands and health to bettering her club, her community, her country and her world.

"4-H is a community and has given me family – a home away from home," explains Tamara. "Someone is always there for you. They take

care of you and look out for you." "It's also given me a huge sense of self-confidence," she added.

And it is this self-confidence that enabled Tamara to win the organization's National Citizenship Award and to be nominated for Member of the Year for Cumberland County 4-H.

The National Citizenship award enables young members of 4-H to learn about Canada and its history including governance, parliamentary procedures, citizenship and politics in a way that is fun, inspiring and memorable. Sixty members were selected across Canada for 2014, including Tamara.

"We were able to produce a mock debate in Parliament house in Prince Edward Island as part of the 150th anniversary of Confederation!" "We learned so much."

The goal of 4-H is to develop citizenship, leadership, responsibility and life skills of youth through experiential learning programs and a positive youth development approach.

"4-h is such a good program and helps so many different people with so many different things – it becomes your life," shared Tamara. "I've seen so many people grow from the program."

And Tamara is no exception. She earned several industry scholarships including the Canadian Sheep Breeders Association scholarship, 4-H Council scholarships and an entrance scholarship from Dalhousie University upon enrolling at Dalhousie University's Faculty of Agriculture in 2013 to study Animal Science.

"I've always loved this campus, she explained. I've attended 4-H weekend on this campus and have just always wanted to come here. I love it here!"

Tamara feels at home on campus with its close-knit community of like-minded students.

"It is such a great campus and a close campus, everyone knows everyone and there are so many opportunities," said Tamara.

Scott Reid, Coach of the Dal AC Woodsmen team saw Tamara competing in a 4-H woodsmen's competition and asked her to try out for the Dalhousie team. Now a second year veteran, Tamara is Captain of the Woodsmen's B Team, is employed part-time with the Safety & Security office and worked with Conference Services this past summer.

Tamara combined her 4-H showmanship skills and her love for the Ag Campus this past weekend at the Livestock Show during College Royal October 18th.

Tamara helped with showmanship and clipping of the animals in preparation for the Livestock show. "I know a few tricks!" she added. She needed a few tricks to get through the busy weekend with College Royal Livestock show, travelling with the Dal AC Woodsmen's team, attending a 4-H banquet and studying for mid-terms.

But Tamara wouldn't have it any other way. "I plan to continue my membership in the 4-H program, eventually becoming a leader," she said while also pursuing a career in veterinary pathology or wildlife conservation.

This is Agriculture and This is home for Tamara Snook.



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