

GREEN HOUSE

The first

100
years

The builders, the discoverers,
the alumni and much more

THE DYDE HOUSE

Arthur Erickson designed
house gifted to the DBG

PAGE 6

THE MEMORY KEEPER

Jack Francis' labour of love

PAGE 16



ALES
100 1915-2015
years

Our accomplished past ...
our limitless future

ALES 100 Opening Celebration

“Leadership in providing solutions to global challenges”

A panel discussion hosted by the
Right Honourable Kim Campbell
Featuring Ed Stelmach, Jim Hole,
Janet Fast and William Shotyk

October 22, 2014
3:30 PM – 5:30 PM
Myer Horowitz Theatre,
University of Alberta

A light dessert reception will follow

For more information, visit
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ALES
100 
1915-2015
years

A CENTURY OF SOLUTIONS:

The history of the Faculty of Agricultural, Life & Environmental Sciences' first century

WRITTEN BY AWARD-WINNING AUTHOR CURTIS GILLESPIE

A CENTURY OF SOLUTIONS
CURTIS GILLESPIE

Curtis Gillespie weaves a very readable and interesting tale about the Faculty of ALES' first 100 years by focussing on the people that shaped it.

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FROM THE DEAN

WE'RE HAVING A PARTY AND YOU'RE INVITED!

We're turning 100! Beginning this October, we'll be celebrating our centennial with a list of events, worthy of such a special occasion. It will all start with our opening celebrations on Oct. 22 and run until November 2015. In between will be a series of special events including public lectures, an Old Country Fair and perhaps a few surprises along the way.

The faculty's history is an extraordinarily rich one, which we've tried to capture in a book. Penned by award-winning writer Curtis Gillespie, *A Century of Solutions* chronicles the faculty's first 100 years. It gives a fascinating account of the challenges encountered in establishing and growing the faculty and highlights some of the key people and events that shaped the faculty through its first 100 years.

The book will be available in October but you can order your copy now online at www.ales.ualberta.ca or at www.ales100.ales.ualberta.ca for \$20. Shipping and handling is extra.

I'm sure you'll find the book as fascinating and entertaining as I did. Reading through it only heightened my deep sense of honour and humility in becoming the faculty's 12th dean. I did my PhD in plant science and spent the majority of my career in government, most recently as CEO of Alberta Innovates Bio Solutions. I started my five-year term as dean, succeeding John Kennelly, last August and in the short time I've been in this privileged position, I've already had the pleasure of meeting many of you and I look forward to meeting many, many more of you, especially throughout the coming year as we celebrate our centennial together.



"The faculty's history is an extraordinarily rich one, which we've tried to capture in a book... A Century of Solutions chronicles the faculty's first 100 years."

STAN BLADE Dean, Faculty of ALES



GREEN HOUSE

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Dean

Stan Blade

Assistant Dean, Administration

Judy Carss

Assistant Dean, Development

Ken Crocker

Development Team

Katherine Irwin

Editor

Michel Proulx

Graphic Design

Plumbheavy Design Co.

Contributing Writers

Bev Betkowski, Kate Black, Alexandria Eldridge, Curtis Gillespie, Elizabeth Ng, Michel Proulx, Andrea Ross

Contributing Photographers

Kathryn Chandler, Alexandria Eldridge, Epic Photography, Amanda Gallant, Jody Paulson, Michel Proulx, Richard Siemens, John Ulan

Cover Photo

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Send your comments to:

The Editor

GREENHOUSE

2-14 Agriculture/Forestry Centre

University of Alberta

Edmonton, AB, Canada T6G 2P5

Tel.: 780-492-8127

Fax: 780-492-8524

Email: greenhouse@ales.ualberta.ca

Website: www.ales.ualberta.ca

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 **UNIVERSITY OF ALBERTA**
FACULTY OF AGRICULTURAL,
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HAPPENINGS

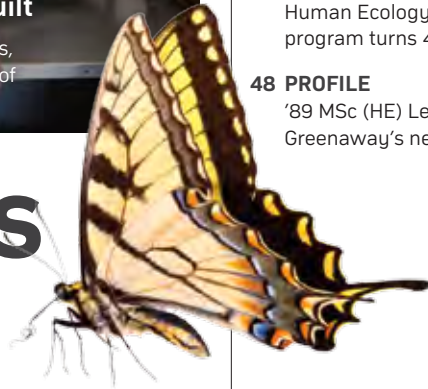
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The Museum that Jack Francis Built

Housed in the old Horse Barn on South Campus, Jack Francis' labour of love is a treasure trove of agricultural artifacts.

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FACULTY NEWS

ARTHUR ERICKSON-DESIGNED DYDE HOUSE GIFTED TO THE DEVONIAN BOTANIC GARDEN

Gift fulfills original owner’s wish

BY MICHEL PROULX

Earlier this year, the Devonian Botanic Garden received a special gift. Out of view from the garden’s visitors is a 50-acre parcel of land, on which sits the Dyde House, a magnificent structure with stunning views.

The house was built by Henry Alexander (Sandy) Dyde, an accomplished man who was one of the first U of A Rhodes Scholars. He served in various capacities during both world wars, practiced law and, along with his wife, Bobby, was a leader in the cultural life of the city after WW II. Indeed, he helped establish the Edmonton Symphony Orchestra and was a board member of the famed Stratford Shakespeare Festival while Bobby was the first woman to be a member of the board of the National Gallery of Canada.

As Dyde approached retirement, he and his wife wanted to build a

house outside the city. They bought 240 acres of land at an auction from Imperial Oil in 1958 but Sandy Dyde also had something else in mind when they bought the property. He and his good friend Jim Whyte, who was chair of the university’s Department of Botany, knew that with the recent major oil discovery in nearby Leduc that had transformed the province’s economy, green space was threatened. They dreamed of establishing a botanic garden and the land the Dydes bought, considered scrub land as it contained many different types of soil, turned out to be ideal for that purpose.

The Dydes immediately donated 80 acres to the university to create the Devonian Botanic Garden and set aside 50 acres on which to build their house. Dyde had a difficult time finding an architect he was happy

with. In discussing the issue with one of his friends, Lillias Torrance Newton, an art professor at McGill University, she suggested he get in touch with one of her students who had just graduated, someone she thought showed great promise. His name was Arthur Erickson.

The young graduate was about to embark on a distinguished architectural career and become Canada’s most famous architect, achieving world-wide fame for his work, which would include the Canadian embassy in Washington, the Museum of Anthropology at UBC and the City of Fresno’s City Hall, among many, many others. He was renowned for his unique designs, many of which were futuristic, but he was perhaps even better known for creating buildings that were in harmony with their surrounding natural environment.

And that's the first thing you notice when you drive up the private road at the DBG that leads to the Dyde House. It seems to almost be a natural part of the land. Once you enter the house from the side, a quick turn to the left leads you to the sunken living room with its Manitoba limestone floor and its wall of windows that provide a breathtaking view of the grounds. It is beyond stunning.

The gift offers the DBG countless opportunities to use the house and the grounds for a variety of public and private events. And most importantly, it will finally fulfill Sandy Dyde's wish to have the entire 240 acres he purchased from Imperial Oil gifted to his treasured botanical garden. 🍀

HISTORY OF THE DYDE HOUSE

- 1958** Sandy and Bobby Dyde purchase 240 acres of land from Imperial Oil at an auction
- 1958** The Dydes donate 80 acres to the University to establish a botanical garden
- 1961** The Dyde House is built
- 1969** Sandy Dyde retires
- 1975** The Dydes sell an additional 110 acres to the university, at a fraction of its market value. The DBG uses 30 of those acres to build the Kurimoto Japanese Garden and some buildings
- 1976** Sandy Dyde dies
- 1979** Bobby Dyde dies
- 2014** Dyde family donated house and remaining 50 acres to the DBG



DBG BENEFACTORS: Sandy Dyde, left, and his wife Bobby Dyde. BELOW: A view of the house from the side.



INSIDE: A view of the sitting area in front of the fireplace, above, and the dining area. The floor is made of Manitoba limestone while the ceiling is finished with B.C. cedar.

Devonian Botanical Garden



A 240-acre property located **15 minutes southwest of Edmonton**



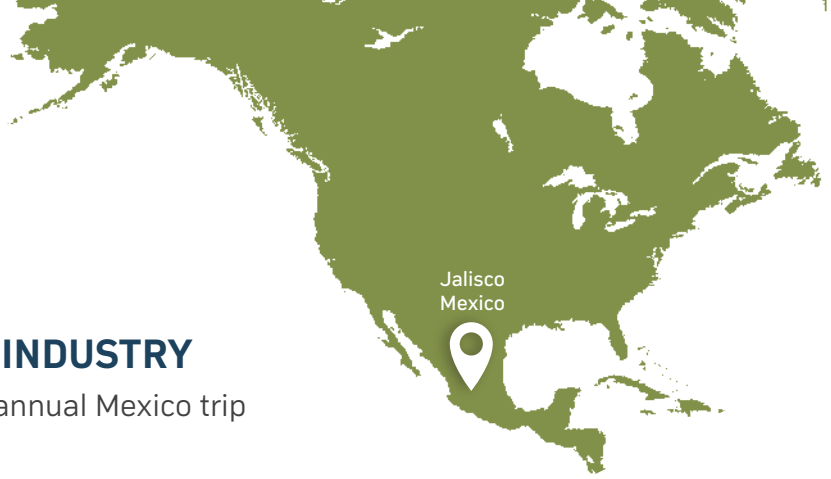
Contains more than **7,000 varieties of plants** among the cultivated gardens and plant collections, indoor show houses and an extensive nature trail system including the Kurimoto Japanese Garden and the Native People's Garden



Hosts about **70,000 visitors every year** between May and October



Named the **Botanical Garden of the Year** in 2013 by the Canadian Garden Council



STUDENT EXPERIENCE

ALES JET-SETS TO EXPLORE INTERNATIONAL AGRI-FOOD INDUSTRY

Students make career connections on annual Mexico trip

BY KATE BLACK

Most university students who head to Mexico during the summer are usually doing it to party the past semester away. An ALES program, however, is taking students to the country to show them a different kind of good time.

The faculty has been hosting undergraduate trips to Mexico since 2010. Started after an endowment to ALES by the Scotiabank Corporate Social Responsibility Fund, the first trip was geared towards teaching students about sustainable resource development. The second year allowed students to organize a self-directed project, and the third and fourth years were focused on community service-learning and immersing the participants in a less-fortunate world than the one they live in.

The most recent trip, which happened at the end of May, took a different turn. This year, the nine-day excursion focused on career development. The Faculty of ALES’

Marta Gomez-Wu, Assistant Dean (International), said the change in direction was a response to students’ expressed desire to explore career options prior to graduating.

“We wanted to create a kind of activity that would give graduating students an idea about what career they might be interested in pursuing,” she said.

The faculty took five students in their final year to Jalisco, Mexico. They were graduating either from Food and Nutritional Science or Agriculture Resource Management or Agriculture and Food Business Management.

Diana Nguyen, a Nutrition student, said each day in Jalisco was packed. On any given day, the group could be visiting a food production plant, meeting with government officials or looking at research facilities. One thing was a given every day of the trip: lots of eating.

“It was mostly observing and asking questions. (The production staff) were always open to suggestions, but we were learning more than they were learning from us obviously,” she said.

But most importantly, it opened her eyes to the connections in the global food trade.

“The biggest thing I learned was how related the whole agri-food business trade is. One thing you do in one country has to abide by rules in other countries if you want to make sure you can export it,” she said.

And these multinational connections paid off. After returning from the trip, she landed a job as a product development technologist at the Food Processing Development Centre in Leduc, the sister station of the production facility they visited in Jalisco. She works with the other scientists at the centre, helping clients develop new food products.

THE ALES GROUP VISITS A FAMILY-OWNED DAIRY PROCESSING PLANT. *The students examined how the plant made cheese and participated in one of the company’s focus groups.*





QUICK RIPENING: The ALES group, including students Diana Nguyen (holding the raspberry) and Yuxin Ji, visited a raspberry farm that uses crop management techniques to speed up the ripening of the fruit.

Yuxin Ji, on the other hand, had a different experience — she changed her mind about her career path after the trip. Before, she had hoped to work in a processing plant as a technician or in quality assurance. Now, she feels like she'd be better suited to working behind-the-scenes in a plant's office.

The international student from China just graduated with her BSc in Nutrition & Food Science, but she's being flexible with her career options. After all, she learned on the trip that there's a lot more out there than she first thought.

"These advanced technology and automatic systems broadened my

horizon and let me know what I have learned is far from enough," she said.

Gomez-Wu added that exploring one's future is the purpose of the trip. Having an international experience not only makes students stand out in the job market, she said, but prepares them for their career down the road— wherever they choose to go.

"We want the students to be able to bridge from their degree into their dream job or a great entry-level position in their field but with a bit of a more international background... and these kinds of trips open that door a little wider." ■

FACULTY NEWS

JOHN KENNELLY LEAVES DEANSHIP

BY KATE BLACK

John Kennelly bid farewell as dean in a moving ceremony last June 12, where he capped off his two-term, 10-year run as dean surrounded by more than 300 alumni, friends and colleagues in the Telus Centre.

Kennelly recounted his unlikely journey to becoming a dean. He dropped out of school at 13 to work on the family farm. Realizing he wouldn't inherit the farm, (he's the second oldest son), he went to night school at 21 to earn his high school equivalency before obtaining his BSc from University College Dublin in 1976 and his PhD from the University of Alberta in 1980. Though he joked about wanting to leave Edmonton as soon as possible to escape the harsh winters, he noted the lasting impact the University of Alberta had on his life.

"As Horace Mann said 170 years ago, education can still be the great

equalizer for many people. It certainly has been the case in my life," he said.

Members of the university's senior administration, including the president and the provost, as well as members of the faculty's executive team reflected on his accomplishments.

In honour of his commitment to undergraduate students, the faculty announced the creation of a new ALES undergraduate scholarship to be named after Kennelly and his wife Louise. Kennelly, however, stressed the importance of his team after being lauded for his work. He closed by stating meaningful relationships are key in producing a successful faculty, and above all, a full life.

"At a time like this, I'm reminded once again that life is really about people...the same is true for universities." ■



FACULTY NEWS

THREE INTERNATIONAL EXPERTS JOIN ALES

CAIP chairs from Germany, Sweden and Brazil bring impressive research repertoires to the faculty

BY KATE BLACK

A trio of young international scholars joined the Faculty of ALES over the past few months, thanks to the Campus Alberta Innovation Program.

After completing her PhD in the faculty six years ago, Brazilian Carla Prado returned as the newly appointed CAIP Chair for Nutrition, Food and Health. She'll examine the interaction between abnormal body composition — ratios of muscle and fat tissues — and overall health, paying particular attention to the role food plays on their body composition and health.

Her recent research indicates that abnormal body compositions can occur at all body weights and predict complications in clinical conditions such as diabetes and cancer. "In the future, body composition could be something that we can use during diagnosis to decide the treatment of a patient," she says.

Jens Walter, CAIP Chair for Nutrition, Microbes and Gastrointestinal Health, is starting two research programs to examine the relationship between gut bacteria populations and human health. The

German researcher will examine the symbiotic relationship between gut microbes and their host. He'll also identify how diet impacts the microbial communities in the gut and what health consequences they have.

Eventually, he anticipates he will design dietary strategies to target gut bacteria.

Walter noted animal models demonstrating gut bacteria can contribute to obesity and autoimmune disorders. He's excited to bridge the gap between these animal models and human applications through his research programs.

Sweden's David Olefeldt is the CAIP Chair in Watershed Management and Wetland Restoration. He has researched how disturbances such as permafrost thaw and wildfire affect wetland carbon cycling and links between wetland and aquatic carbon cycling. As CAIP chair, he'll look at how both human disturbances and restoration efforts impact wetland carbon cycling. He said the amount of industrial activity in northern Alberta provides a unique environment for wetland research.

"Nowhere else in Canada is the boreal forest under the same pressure from human activity.

All of these disturbances — climate change, human disturbances and (wetland) restoration — that's the mixed layer I'm trying to look at," he said.

CAIP was created in 2011 by the provincial government to recruit new research leaders to Alberta in food and nutrition, energy and the environment, water and neuroscience. ▀



MICHEL PROULX

INTERNATIONAL EXPERTISE:
CAIP Chairs Jens Walter,
Carla Prado and David Olefeldt.

THREE COURSE-BASED MASTER'S PROGRAMS ON THEIR WAY TO ALES

One-year programs in forestry, land reclamation and food safety look to boost graduates' professional skills

BY KATE BLACK

Graduates looking to enhance their professional skills or change career paths are in luck: three one-year course-based master's programs are rolling into ALES over the next year.

The Department of Renewable Resources will host a Master of Forestry program and a master's program in land reclamation and restoration while the Department of Agricultural, Food & Nutritional Science will offer a master's program in food safety.

Vic Liefers, chair of RenR, said the new course-based programs in forestry and reclamation and restoration will provide students with a more direct path to obtaining professional accreditation.

Many of the courses offered in the two programs will be similar to forestry and reclamation courses offered by the department at the undergraduate level, and students must also finish a major project in order to graduate.

Liefers said the programs are a perfect way for industry professionals to upgrade their knowledge to current research. But, because students can modify their course selection based on their educational backgrounds, Liefers said the programs also offer enough coursework for people with less knowledge in the discipline to be able to enter the workforce.

"If (students) already have a degree in forestry or a degree in land reclamation, they would just be upgrading those skills and getting a higher level of expertise and they could learn some additional skills... and filling in the gaps they didn't get in their undergrad," he said.

"We're also hoping we'll attract



BOOSTING SKILLS: ALES will be offering three new, one-year course-based masters. the masters in forestry got off the ground this year while the ones in land reclamation and food science will start next year.

a new group of students who want to become foresters, or reclamation/restoration experts, and we're giving them an opportunity to do this."

AFNS' food safety master's program will be open to anyone who has completed basic undergraduate-level food safety courses, which are yet to be determined by the department.

The program's courses will revolve around food-borne pathogens, advanced chemical analysis and regulatory food safety topics, and will also include toxicology and epidemiology courses taught by the U of A's School of Public Health.

Michael Gänzle, AFNS' Director of Food Science & Bioresource Technology, said the program will

provide students with hands-on skills to boost their theoretical knowledge earned in their undergrad, and ultimately become top players in the food safety industry.

"The demand really comes from regulatory agencies and industry. We, in our undergraduate program, turn out people with a BSc in food science, but they are lacking some of the advanced competencies that industry expects in their food safety quality assurance," he said.

The Master of Forestry program has already enrolled around 20 students. The reclamation and restoration program and the food safety program will both be open for enrollment in fall 2015. ▀



JODY PAULSON

EVENTS

HONOURING A TRUE ALBERTA PIONEER

Roy Berg gets his due

BY MICHEL PROULX

Fifty-four years after a young U of A animal geneticist obtained funding to buy a ranch, traveled the province and found the perfect piece of land to conduct his cattle research program, Roy Berg got his due.

The Kinsella Research Station, where Berg conducted his then-controversial research that revolutionized the beef cattle industry, was re-named the Roy Berg Kinsella Research Station.

More than 350 people attended the dedication ceremony held in mid-August and hosted by Livestock Gentec and Stan Blade, the recently appointed dean of the Faculty of Agricultural, Life & Environmental Sciences. Guests included more than 40 members of the extended Berg family and many of Roy Berg's former colleagues, students and friends.

Berg's daughter, Ruth Ball, said her father "would have been very proud – and humbled – by what is going on here today. He would have so enjoyed seeing that the ranch is continuing to support quality beef and rangeland research."

Mick Price, who was a colleague of Roy Berg, explained that when the university bought the ranch in 1960, Berg's research, which had everything to do with cross-breeding, was considered "the devil's work." The common belief in the beef cattle industry at the time was that if you cross-bred, the first generation would be a little more productive and a little stronger because of hybrid vigour but subsequent generations would essentially deteriorate.

Berg knew subsequent cross-bred generations would continue to benefit from hybrid vigour and become more productive and stronger with each passing generation, said Price. "He needed to prove it and he established two herds, an experimental herd and a control herd. It took about 10 years to prove his point."

Berg's hybrid breeding program eventually led to a 40 per cent increase in cattle productivity, helping to make Alberta the world leader in beef production that it is today.

The dedication took place during a Field Day, where participants were

provided with tours of the ranch to see its operations. The event was part of Livestock Gentec's annual conference. Berg's research program evolved through the years to become the Alberta Bovine Genomics program and then Livestock Gentec, which conducts genomic research to improve the health and production of all livestock. ▀



JODY PAULSON

FIELD DAY: After the dedication ceremony re-naming the research ranch in Roy Berg's honour, guests and Livestock Gentec conference participants toured the facility.

GARDEN ON UNIVERSITY LAND LENDS HELPING HAND

South Campus' Prairie Urban Farm donates more than 100 kg of fresh vegetables to Youth Empowerment & Support Services

BY KATE BLACK



HARVEST TIME: Pure Prairie Garden coordinator Nicole Martin, above right, and two volunteers, pack boxes of freshly-picked produce to donate to the Youth Empowerment & Support Services, below.

With a firm tug, Nicole Martin frees a turnip from the earth. The vegetable, with dirt clinging from its hairy spindles, is just a fraction of the 110 kg of produce the Prairie Urban Farm donated to Edmonton's Youth Empowerment & Support Services (YESS) on a sunny August day.

This is the third donation to YESS from the Prairie Urban Farm, a one-acre mixed-crop garden on South Campus. Martin, the Garden Coordinator, says donating the vegetables to people in need all aligns with the garden's goals of raising awareness about food security in Edmonton.

"When a city is less food secure, it's the people that are relying on those social services or those living on a fixed income that are most affected by rises in grocery prices. Having these sorts of safety nets in the city creates a kind of buffer to changes in our grocery store prices so that all of us, and those community members in particular, are less affected," says Martin.

After spending three hours harvesting, Martin and a couple of volunteers packed boxes of freshly picked vegetables into her car. As she pulled up into the cramped alleyway behind YESS, her car is greeted by a flurry of smiles from YESS' staff.

Freddy Damani, YESS' External Communications & Marketing Coordinator, is one of the first staff members to start unloading the boxes into the centre's kitchen. Receiving produce is invaluable for YESS, he says, since health and nutrition are two of the first things people lose when going through difficult realities.

YESS' food supply is made entirely from donations, and this is their second year of having a zero junk food policy. Damani says that having healthy choices does more than put food on a plate for the young people — it nourishes young minds to aspire to bright futures.

"Getting candy and junk food on the streets is easy. It's cheap," he says.

"The hard thing to come by is a healthy, balanced meal. So we're very happy to provide that here, and it does wonders for our kids in terms of development, confidence, and really just instilling pride in themselves to take care of themselves. It cascades to other aspects of their life."

And there's plenty more where that came from. Martin says there are enough vegetables on the Prairie Urban Farm to do a few more donation runs to YESS and other agencies across the city — something that makes their dirty hands and muddied shoes all the more rewarding.

"When things started becoming ready to harvest, (we had) the realization that we've created so much abundance. We can feed so many people on just this acre of land." 🍴





RICHARD SIEMENS

ALES Researcher Scott Chang.

HEALTHY ECONOMY

EDUCATED INDIAN WOMEN STILL FACE UNCERTAIN FUTURE

Statistics show the more education Indian women get, the better their wages. But new research suggests Indian women face much more uncertainty than men in landing a good paying job after graduation.

PERCENTAGE OF COLLEGE-EDUCATED INDIAN WOMEN AND MEN WHO WILL NOT GET A JOB THAT MATCHES THEIR EDUCATION IN TERMS OF PAY:



ALES researchers **Sandeep Mohapatra** and **Martin Luckert** of the Department of Resource Economics and Environmental Sociology looked at the uncertainty of educational returns in India, one of the world's fastest developing economies.

The researchers looked into the education and wage levels of more than 31,000 people from ages 15 to 60.

"I was surprised when I saw that there is so much uncertainty, even for men," said Mohapatra, adding that the finding has been overlooked in the literature that informs policy initiatives to mitigate gender bias in human capital investments in the country.

"As in other countries, the policy focus in India has instead been on the average returns to educational investment and not on its uncertainty."

He said the policy impetus should be on closing the gender wage gap at all levels.

"This is not just a social justice issue," he said. "India's spectacular growth over the past several decades has been propelled primarily by its skill-intensive sectors. If India is to continue on this development path, it needs to continue fueling those sectors with skilled labor."

HEALTHY ENVIRONMENT

OILSANDS RESEARCH OFFERS CAUTIOUS OPTIMISM FOR SURROUNDING TREES AND SOIL

Ongoing work by Faculty of ALES researcher **Scott Chang** is providing cautious optimism about how forest soil and trees are coping with oilsands development in Northern Alberta.

Chang has been conducting research on the effects of airborne pollutants on boreal forests and soils in the Athabasca oilsands region for the last several years. He found that, for now at least, the ecosystem appears to be managing nitrogen and sulfur emitted into the air by mining and upgrading activity.

"There are no signs of soil acidification occurring in the boreal forest ecosystem surrounding the oilsands. The ecosystem is handling the nitrogen and sulfur deposition without negative environmental effects observed," said Chang, a professor of forest soils and nutrient dynamics in the Faculty of ALES' Department of Renewable Resources.

Some of the work is drawn from a 10-year research project that wraps up in 2015, aimed at projecting what the maximum load of nitrogen and sulfur depositions could be before a negative impact on the ecosystem occurs, as oilsands activity continues under current emissions standards.

High levels of nitrogen and sulfur that settle onto the soil can cause long-term acidification, leading to nutrient imbalances in forests and in some tree species, death. As well, long-term heavy nitrogen deposits would cause eventual saturation in the ecosystem, and lead to a process called eutrophication, which can affect water quality and result in blue-green algae in boreal lakes.

In conducting the research, Chang and his team focused on mixedwood forests and soils both close to and about 100 kilometres south of oilsands operations. ▀

HEALTHY NUTRITION

ALES AT FOREFRONT OF INNOVATION IN PET FOOD INDUSTRY

A new piece of equipment, the only one of its kind in Canada, will help place the Canadian pet food industry at the forefront of product innovation.

The Wenger X-115, a single-screw pilot extruder, will be making its home at Agri-Food Discovery Place on South Campus later this year. It will enable animal scientist **Ruurd Zijlstra** and his food science colleagues, working closely with pet food companies, to test and develop new and innovative products.

"It's a very nice piece of equipment



to have because pet food producers can directly develop new products on a small-scale but relevant production system that is scalable to a commercial level. We can also use it as a research tool," said Zijlstra.

An added benefit to having the extruder at Agri-Food Discovery Place is that food science researchers can create functional ingredients in the same facility that can be tested in extruded pet food.

"We only need to go one or two doors down and then we can

incorporate these into new pet foods," explained Zijlstra.

He said that because the facility can operate at food-grade quality, the extruder can produce food products. It can produce novel animal feed, such as for piglets or other animals with high nutritional demands. Such feed can be tested in a ring of animal facilities that surround Agri-Food Discovery Place.

The extruder is scheduled to be delivered this fall and operational by the end of the year. 🍌

HEALTHY COMMUNITY

ALES EXPERTISE BEHIND NEW LAW TO HELP CAREGIVERS

February 1, 2014, the day new provincial legislation that will help Albertans juggle jobs and caregiving duties came into effect, was a good day for ALES researcher **Janet Fast** and her colleagues.

The *Compassionate Care Leave Act* amends the *Employment Standards Act* to provide Albertans with eight weeks of unpaid work leave to care for a gravely ill loved one, without risk of losing their jobs.

"The legislation will help many Alberta families who are caught in the crunch of caring for ill or elderly family and friends, while also trying to hold down jobs," said Fast, who researches the wide-ranging implications of an aging society.

Edmonton-South West MLA Matt Jeneroux proposed the legislation in a private member's bill. In drafting the bill and arguing for its passage, he relied heavily on a storehouse of research built over 15 years by Fast


and the Department of Human Ecology's Research on Aging, Policies and Practices team.

"Mr. Jeneroux made sure he had the power of evidence behind his arguments. As University of Alberta researchers, it was exciting for us to share our knowledge, to be a partner in shaping policies that help people," Fast said.

She and her team of experts on aging and caregiving trends—including fellow professor Norah Keating, RAPP research manager Jacquie Eales and numerous undergraduate and graduate students—drew on years of painstaking work, time spent combing through national survey data, publishing numerous studies and fact sheets, advising federal and provincial policy-makers as well as employers, and raising awareness about an issue that will, sooner or later, affect most North Americans. 🍌



ALES Researcher Janet Fast.



The MUSEUM
that JACK FRANCIS
BUILT

Kate Black meets the man who oversees a century's worth of agricultural memories



PHOTOS BY AMANDA GALLANT



Jack Francis holds a grinding burr, the museum's first official item.

Jack Francis' ever-present smile unfurls suddenly and solemnly when he mentions the 1851 model reaper.

Back in 1951, farm machinery line McCormick-Deering gave one of its four original 1851 reaper replicas to the University of Alberta after it had sat for years under the hay in the mow of the old horse barn. The Tofield Museum inquired about it and the university gladly handed it over. The 1851 model reaper is still in the Tofield Museum and Francis won't forget it. After all this time, it still stings. "I only knew it as a picture."

But Francis is making sure no other university agricultural items are taken away— not on his watch, at least.

I first met Francis outside a white barn, the old cattle barn, on the northeast corner of South Campus. Dressed in black jeans, an ironed high-collar shirt all framed by a trademark black Stetson, he stands about 5' 4" and radiates farm-hardened gentleness: he moves with a grandfatherly stature, his hands still weathered and strong.

With a jiggle and shake of a key in the screen door, he welcomed me into the barn. The museum has two long rooms, the first housing larger farm equipment, the second full of smaller items from farm life and agricultural research. The smell and temperature of the place are nostalgic of a grandparent's attic. Francis says nearly 400 artifacts stack the museum's walls. He begins recounting the backstory of several items and the proud twinkle in his eyes starts to make sense. These rooms, after all, are home to a century's worth of history, a history he is closely connected to.

While he walks me through the second room, I notice the barn dust which hangs lazily on his hat. He shows me the framed photos of prized cattle aged by daylight that plaster the walls alongside sickles, sheep tail dockers and other steel farm tools. Gently rotating and brushing off

smaller items as he walks past them, Francis' face brightens when he talks about the lab equipment in the back corner of the room — the '60s-era x-ray machine and the surgical equipment hold a little piece of his past.

Francis first came to the U of A when he was 18 and worked in the beef barn for six months. He went back to work on his family's mixed farm for four years, until 1949, when he returned to the U of A, not as a student but as a full-time herdsman for the swine unit at the university farm. For the next 43 years he assisted professors and students with research projects until he retired in 1992. After that he regularly came back to visit the farm, what he calls his "old cow pasture," from his home in Belgravia, the residential neighbourhood immediately north of South Campus.

He noticed that as researchers transitioned to new equipment, the vintage pieces were carted off to the dump or swept away in storage.



TOOLS OF THE TRADE: A pair of tail dockers, used to shorten the tails of sheep, primarily for hygiene purposes. Francis used the one on the left in the 60s. The other is older and was used probably in the 40s. Below, Francis stands by a 60s x-ray machine.





Francis's eyes soften on the row of equipment beside him, his smile brimming with stories. He taps his fingers on a table, pauses, and grins: "I enjoyed every bit of it."

ARTIFACTS: Francis stands beside a centrifuge, used to separate animal fluids. Hanging immediately above it on the wall are a nose basket for horses, the shoe of a seeding drill, used from the 20s to the 40s, and a cow poke, also called a fence pusher. OPPOSITE PAGE: Francis works on a recently-donated buggy. Below that are air metres, used in the 60s and 70s, to measure animals' oxygen intake.

After seeing more pieces of the university's agricultural history forgotten among dust and junk, he knew he had to do something. "It triggered me that we better save some of this stuff because I knew there was a lot that was sent away. Unused material from the offices and the labs would end up out here in a number of barns or in the loft. Every once in a while they would clean out the old stuff and send it to surplus," he says.

So, he wrote the Department of Agricultural, Food & Nutritional Science a letter in 2000:

On numerous occasions various staff members have been puzzled as to what to do with articles no longer in current use but which have been very much a part of the story of the University's Agriculture Department, he wrote.

There have been a number of public occasions in the past few years when a display of artifacts would have been of considerable interest to persons visiting the Centre.

He proposed starting a small museum on the farm to collect

the artifacts. The department was receptive to the idea and the museum was born shortly after in the university's former horse barn. The museum started with stored used research equipment from the farm but has grown to include donations from the community. Francis estimates about 10 per cent of the items in the museum today were actually used by the students and professors of the Faculty of ALES.

The first official item of the museum hangs modestly on the wall among the other tools. It's called a grinding burr, I read on its white nametag, and it looks like a rusty, flat donut. I study the burr with feigned understanding, but Francis quickly sees through my urbanized ignorance.

"You know the basics behind that, eh?"

Well, no. I remind him I grew up beside a busy city street and a soccer — not canola — field.

His encyclopedic answer nearly bursts out of his mouth. Burrs are used to grind food particles into smaller pieces, he says, like a salt or pepper

mill. He walks across the room to a hand-operated flour grinder to show me exactly how the burr would've been used in his day.

Each of the artifacts is labelled with a small white nametag, but is armed with several short stories from Francis. Like the soil testing set which belonged to Dr. Toogood, who brought modern square-dancing to Edmonton from Minnesota. Or the machine Francis used to measure the oxygen intake of sheep — he never thought he would've worked with sheep, he remarks.

Though the items are just as treasured to Francis as their age-old stories, they were all nearly lost in 2010. The Saville Athletic Centre was slated to be built where the museum stood and Francis feared it and all the items it contained would be moved into storage — exactly what he was trying to prevent in the first place. Thankfully, Barry Irving, the manager of the ALES research stations, including South Campus, said he could clean up the old cattle barn and keep the items in there — and that's what

he's been doing ever since.

Francis celebrated his 87th birthday in May. He's hesitant to talk about his second "retirement," and doesn't plan on doing it any time soon. "I don't know, (I will) probably one day when I have to," he chuckles. "I hope somebody will come along some day and do something about it." For the time being, though, he's happy spending two days a week in the museum. After all, he's keeping himself busy, reorganizing, building, painting. He welcomes visitors regularly, like university classes and seniors' centres. He's expecting a couple to come into the museum to take their anniversary photos in the next couple of weeks as well.

His latest project is restoring a buggy. A woman donated it from Ontario and Francis believes it's similar, if not identical, to the ones used on the university farm when he worked there. So far, he's reconstructed the frame of the buggy and is currently working on plastering and re-painting the bench seat. Once it's fully built, he'd love to see it pulled in a parade, he says, while rolling the body back and forth. Things like this buggy are too good to sit in storage, he adds, and bringing it out into the public fits into his goal for the museum. "It's just to let the next generation realize what we went through in research and what happened in the past," he says.

Francis loves to talk about the items in the museum, but he's short on words when talking about himself. When asked about his favourite memory on the farm, his gaze drifts downward. The distant buzz of a track and field meet and the spray of gravel beneath truck tires hum over his voice. But time stands still within the antique comfort of the museum's wooden walls. Francis's eyes soften on the row of equipment beside him, his smile brimming with stories. He taps his fingers on a table, pauses, and grins: "I enjoyed every bit of it." ♣





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Jody Paulson, Centennial Manager

780-492-8536 // jody.paulson@ualberta.ca



ALES Through the Century 1915-2015



We take a look back at some of the highlights that marked the first century of the Faculty of Agricultural, Life & Environmental Sciences. You'll be surprised by what we found out.

COMPILED BY MICHEL PROULX AND ELIZABETH NG



A LOOK BACK AT THE LAST 100 YEARS OF ALES

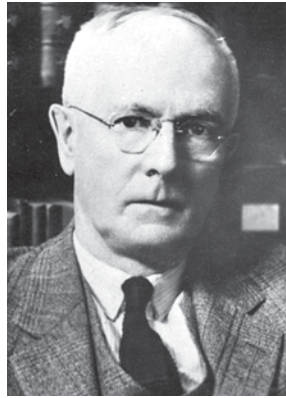
1915

The Faculty of Agriculture is created, "with a staff of two members, a small piece of ground close to the University and practically no livestock." (E.A. Howes) Sixteen students enroll.

The Department of Animal Husbandry begins by offering one course: Breeds of livestock, market classes of livestock, and stock farm management.

The Department of Horticulture founded.

The Department of Field Husbandry created, founding Dean **E.A. Howes** serves as its first instructor



The first class of 10 students graduates with a B.Sc. in Agriculture.

110 WWI veterans enroll in the Faculty. The federal government pays their tuition, the University supplies the equipment.

1920

The University purchases 380 acres for \$53,000 in location now known as "South Campus."



1919

The Department of Soils created, **F.A. Wyatt** is its first Head.

The University Stock farm is purchased.



The Department of Household Economics is established within the Faculty of Arts and Science.

1918



1908

The University of Alberta opens its doors with five faculty members and 45 students.

The Ag Club is founded as the *Collegium Agricolorum*. Inactive from 1912-1914, it's reactivated in 1915 by student R.D. Sinclair, who went on to become Dean. The Ag Club is one of the oldest student clubs still in existence at the U of A.

1911



1917

A flock of sheep are introduced to campus, pastured in front of three residence buildings.

"It may be recorded that the venture did nothing to enhance the popularity of the Faculty in its initial stages." (former Dean of Agriculture R.D. Sinclair)

The original Field Crops Barn was in service for more than 30 years before it was dismantled in 1949.



1921

Dilution	Kaw Cream 1:1000	Past. Cream Ice	Faucet Cream 1:1000	Cream Churn Ice	Cream Milk 1:1000	Butter Milk 1:1000
Moulds	20,000	0	66,000	19	110	270
YEASTS	416,000	0	1,320,000	800	670	480

Dilution	Wash Water Ice	W. Water Run Ice	Salt Used 1:1000	Finished Butter 1:1000	Treated Liners 1:1000	Air in Creamery 1:1000
Moulds	0	7	0	30	0	0
YEASTS	0	6	0	50	0	0



E.H. Strickland, the first Professor of Entomology, leads an effort with thousands of volunteers to control grasshoppers, which are threatening to destroy all crops in southern Alberta. The cost is a staggering \$248,000. The following year, Strickland is summoned to the legislature to explain what the opposition considers a misappropriation of funds. Documents are gathered, showing that although Alberta spent much more than Saskatchewan and Montana to fight the infestation, their crops were wiped out while Alberta's weren't.

The Agricultural Reading Room opens.

The Department of Entomology is created.



1922

John McGregor Smith is appointed the first (and only) member of the Department of Agricultural Engineering. Reportedly, President Tory offered him the job after a five-minute conversation during a chance encounter.

The Department of Dairying is created in May. C.P. Marker is appointed Professor of Dairying and Head of the Department – without a salary from the University. Marker was Alberta's Dairy Commissioner at the time, and being a professor at the fledgling university was considered a part-time side venture.



1923

Sheila Marryat is the first woman to graduate from the Faculty. A drama enthusiast, she goes on to work for CKUA, which hit the airwaves in 1927. For many years, Marryat is the radio station's only full-time employee.



1928

The Breton Plots are established near Breton, Alberta, to find a system of farming suitable for Gray Luvisolic soils, a low fertility soil that is common in Alberta. Research conducted at the Plots led to many discoveries including the importance of crop rotation and the use of appropriate fertilizers.

The University purchases additional 240 acres west of 122 St. in area now known as the West 240. Farm buildings are moved from the main campus (where the Northern Alberta Jubilee Auditorium is today) to South Campus. Five farm buildings are put on wheels and rolled out to the farm on South Campus.

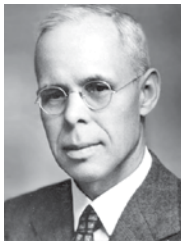
The Department of Household Economics becomes School of Household Economics. **Mabel Patrick** is named Director. She will serve in that capacity until 1956.

The Department of Poultry Husbandry is created, Miss Helen Milne is its first instructor and only staff member.



1929





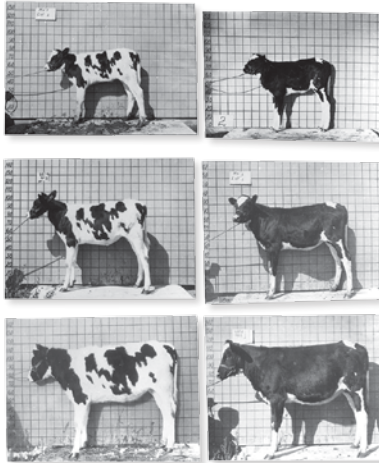
Robert Newton appointed dean.

1942

Faculty of Agriculture Dean Robert Newton is appointed President of the University. He serves in that capacity until 1950.

Robert Sinclair is named the third Dean of Agriculture, the first U of A graduate to hold the position.

The Department of Animal Science is formed in May by the amalgamation of the Departments of Animal Husbandry, Veterinary Science and Poultry Husbandry.



1943

Dean **Robert Sinclair** is one of Canada's representatives at the Hot Springs, Virginia conference that laid the foundation for the creation of the UN's Food and Agriculture Organization.

1940

1944

The Department of Plant Science is formed by the combination of the Departments of Field Crops and Agriculture. J.R. Fryer is its first Head.

1945

Government programs help returning veterans enter universities; enrolment nearly doubles.



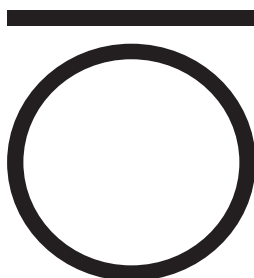
1947

The first Varsity Guest Weekend is hosted by the Faculty of Agriculture. It later becomes known as Field Day. In 1950, Ag student Stan Powers reorganizes the event and opens it up to "outsiders" to "bring them into the lab and show them experiments in progress." The event is so successful, the rest of campus adopts the idea in 1951.



1948

The 1st Bar None dance is held. Open to all students from across the university – hence the name "Bar None" -- the dance is the longest running event at the University of Alberta.



Arthur Gilbert McCalla is appointed Dean. He also served as Dean of Graduate Studies from 1957 to 1971 and was a member of the National Research Council from 1950 to 1956. The U of A awards up to 15 Arthur G. McCalla professorships every year.

1951

1953

The Faculty (and the U of A) confers its first PhD, in plant genetics, to Clayton Person of the Dept. of Plant Science. Person goes on to make a major contribution in his field, increasing our understanding of how the genetic structure of parasitic populations interacts with their host populations. He is made a Member of the Order of Canada in 1986.



1954

The Agriculture Building officially opens.

Roy Berg is hired. His research will revolutionize the conservative cattle industry. Using cross-breeding, he increases cattle's productivity by 30 to 40 per cent.

1960

The University purchases the Kinsella Research Ranch, a 5,600-acre facility, on the advice of Roy Berg, who will conduct his controversial cattle cross-breeding research there.



1955



1961

The Department of Agricultural Economics and Farm Management is created, Travis Manning is the first Head.

War Supplies Agency recruits Dean Fred Bentley and the Faculty of Agriculture to be a part of Food Coordination in the event of a nuclear emergency.

"... if there were a major national emergency, my full time might be required, but in the case of such an eventuality, the University's operation would be probably interrupted in any case."

1963

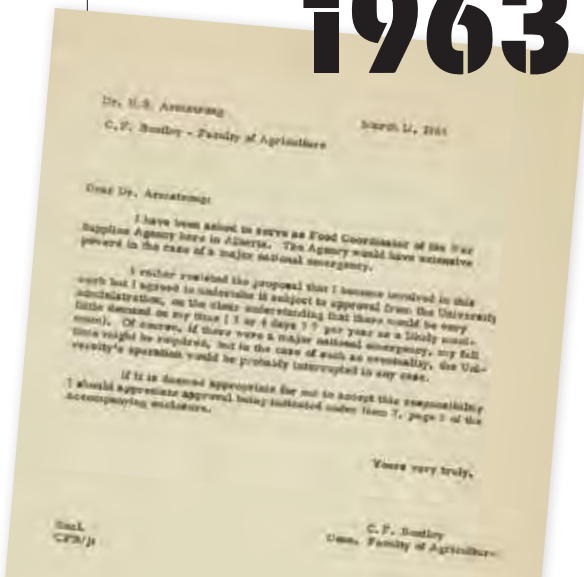
1964

The Department of Dairying changes its name to the Department of Dairy and Food Science.

The Faculty of Agriculture celebrates its 50th Anniversary.

The new Household Economics building opens.

1965



1971



The Department of Forest Science is established. Faculty becomes Faculty of Agriculture and Forestry.



1972



The Clothing and Textiles Collection is founded. Currently, the collection spans over 350 years and contains 23,000 different pieces of clothing and textiles. It is the largest collection of its kind on a Canadian university campus.



1980

Devonian Botanic Garden opens to the public.



1975

The Department of Agricultural Economics and Rural Sociology is renamed the Department of Rural Economy.



1976

The School of Household Economics becomes the Faculty of Home Economics.

1986

The Poultry Research Centre is established.



1981

The newly-built Agriculture/Forestry building opens in October.



1993

The Faculty of Agriculture and Forestry unites with Faculty of Home Economics to become Faculty of Agriculture, Forestry and Home Economics.



2002

Swine and Research Technology Centre opens on South Campus.

The Department of Forest Science merges with the Department of Soil Science to form the Department of Renewable Resources.

1994

Agri-Food Discovery Place opens on South Campus.



1995

Quantum canola is released. Bred by Gary Stringham, the new variety literally saves the canola industry as it is resistant to black leg disease which is killing virtually all canola crops in Canada.



2007

The Faculty changes its name to the Faculty of Agricultural, Life & Environmental Sciences.



The Faculty purchases 800 acres for a fraction of its market value from the Bocock family, who ran a dairy farm on the land. The St. Albert Research Station will have agricultural and environmental research conducted on it.

2008



2010

The Faculty receives a 12,000-acre ranch, located 1½ hours west of Calgary, near Duchess, from Edwin and Ruth Mattheis. The donation paves the way for the creation of the Rangeland Research Institute.

The Department of Rural Economy changes its name again to the Department of Resource Economics and Environmental Sociology (REES).

2015

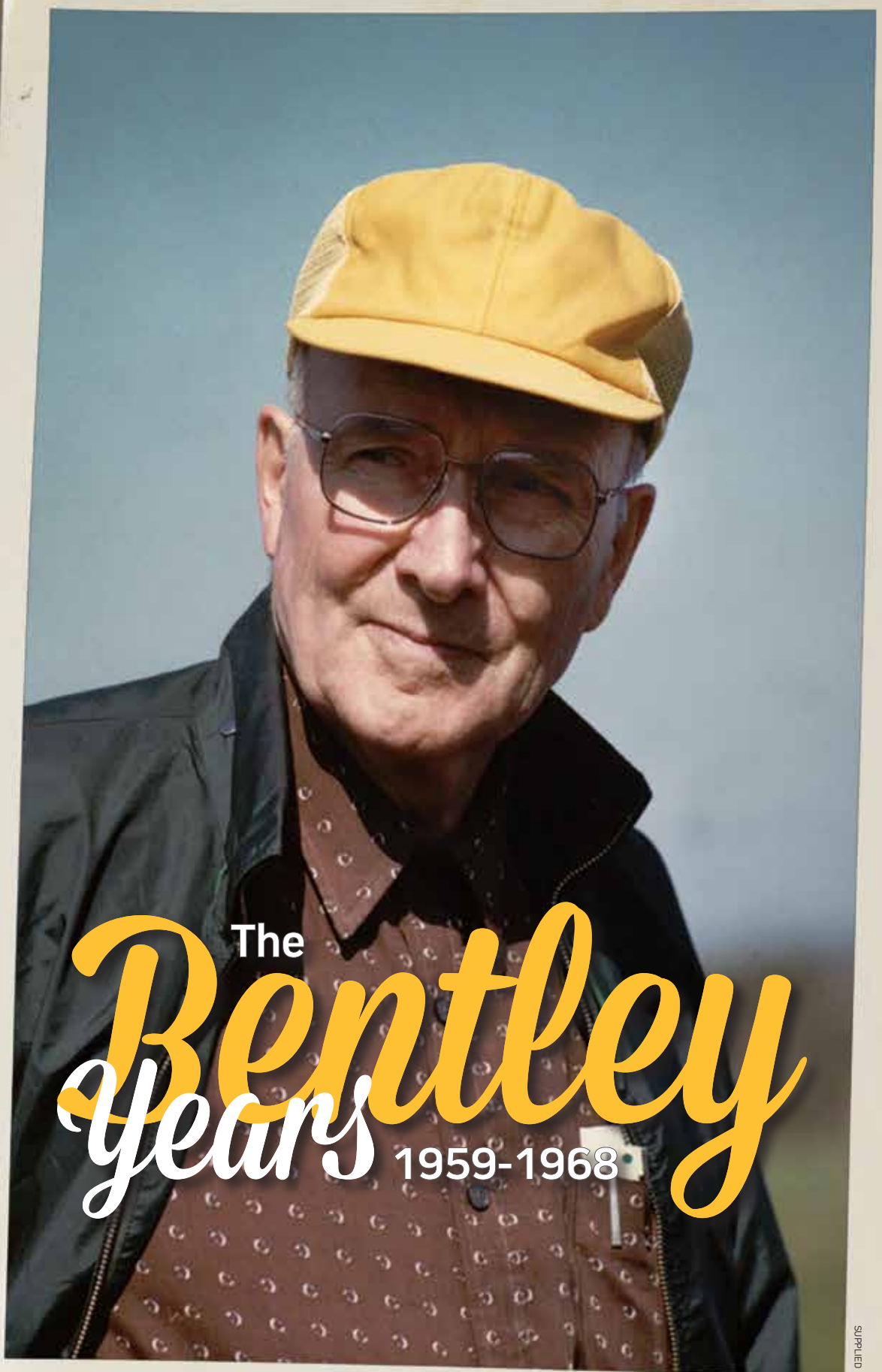
The Faculty celebrates its Centennial.



2011

Today

The Faculty has 1,600 undergraduate students and 500 graduate students. The Faculty of made up of the Departments of Agricultural, Food and Nutritional Science, Human Ecology, Renewable Resources, Resource Economics and Environmental Sociology as well as the Alberta School of Forest Science and Management and the Devonian Botanic Garden.



The
Bentley
years 1959-1968

STUDIO

In

A Century of Solutions, the book that chronicles the Faculty of Agricultural, Life & Environmental Sciences' first 100 years, award-winning writer (and U of Alumni Award recipient) **Curtis Gillespie** takes a close look at the deanship of one of the most revered ALES faculty members, Fred C. Bentley.

In 1935, twenty years after the Faculty was first created, it conducted a survey of its 224 graduates and found that an astonishing fifty per cent had gone on to do graduate degrees, including 26 PhDs. Fifty-nine of the 224 were engaged in farming, but the great majority were working for either the federal or provincial government in (urban) research jobs. This impressive reality continued to strengthen the Faculty as it grew and emerged from the turmoil of World War II. In 1959, Dr. Charles Fred Bentley became the fifth Dean of the Faculty of Agriculture. Like Sinclair and McCalla who preceded him, Bentley was also a University of Alberta graduate. He remained at its head until 1968. In 1965, on the date of the Faculty's 50th anniversary, Fred Bentley spoke to the Faculty's ability to produce fine minds, great ideas and smart solutions. He wrote in "A History of the Office, Dean of Agriculture, University of Alberta," that it was doubtful "that any other faculty has such a high proportion of graduates with advanced degrees. About twenty-four percent of our graduates have earned an MSc degree. Between eleven and fourteen percent have the PhD degree. Moreover, the first PhD awarded by the University of Alberta was to a graduate student in the then Plant Science Department and, until the fall of 1961, more PhDs had been awarded to students in that Department than in any other Department in the University."

In other words, almost from the day it opened its doors, the Faculty of Agriculture was a campus leader in teaching and research (its annual

publications list was substantial). In keeping with Dean Howes' early focus, Fred Bentley was essentially highlighting how the application of scientific advance has been one of the defining factors of the Faculty since its inception.

Bentley was born in Cambridge, Massachusetts, in 1914, the year the First World War broke out. He received a BSc in 1939 from the University of Alberta and an MSc in 1942. He then went on to complete his PhD at the University of Minnesota in 1945. His first academic appointment was at the University of Saskatchewan, where he worked for one year before being offered a position in the Department of Soil Science at the University of Alberta.

It's probably fair to say that he represented the kind of "old school" academic we rarely find in the university setting today, in that he spent as much time in the field as the campus, working with farmers not only in Alberta, but all over the world. In fact, his work took him to an astonishing number of international locations. Described by some as the "conscience" of agriculture, as early as the 1950s Bentley worked overseas in places such as Sri Lanka, India, Indonesia, China, and the Sudan. His work in development assistance is legendary; today a University of Alberta graduate working in international development should not be surprised if he or she comes across the name Fred Bentley attached to an innovative agricultural method, lecture series, or facility in some far off corner of the world.

Bentley spent most of his 36-year academic career at the University of Alberta as a soil scientist, and his teaching and extension work gained him an international reputation as an expert on soil conservation. He'd been here for almost 20 years when, as Dean, he helped the Faculty celebrate its 50th anniversary, and it was a successful celebration. But while much was written about the Faculty's accomplishments in serving the farming community of Alberta and beyond, Bentley believed that not enough attention was paid to the science of agriculture. He well knew that as the global population increased, there would be an ever greater need for the science of agriculture to consider, and help meet, the needs of that population. In *The Western Producer* in the mid-1960s, agricultural reporter Reg Taylor wrote,

Some people will say that Dean Bentley is prejudiced in his belief that Alberta's most important industry is agriculture, in spite of its great development in oil, natural gas and manufacturing. Nevertheless, the Dean is sincere in the belief that agriculture is the most important and vital industry anywhere because it concerns the production of food to fill an absolute need.

Taylor went on to cite the Dean's criticism of both the federal and provincial governments for not adequately funding scientific research in agriculture. In 1965, Agriculture Minister Hays was quoted as saying



“only three percent of the Canadian budget went to agriculture—the lowest percentage in the world for this purpose, says the Dean. He has calculated that the percentage of the Alberta provincial budget for agriculture is even less than the federal portion.”

As the American philosopher William James wrote in the 19th century, “A new idea is first condemned as ridiculous and then dismissed as trivial, until finally, it becomes what everybody knows.” Perhaps that’s applicable to the focus of Dean Howes and then Fred Bentley in their insistence that science held the key to making agriculture (and now ALES) increasingly relevant not just to the advance of knowledge but to the success with which we live every day. Looking back at Bentley’s illustrious career, it’s safe to say that he was a visionary, for he accurately predicted the challenges overpopulation would bring to the world, and the challenges

the study of agriculture would have to rise to in order to help address this issue.

Not only that, but well before climate change was a topic of scientific debate, Bentley expressed concern about changing weather patterns and the negative effects it would have upon plants. In addition, he knew full well that an individual’s income bracket might determine most of all his or her ability to access the necessities for life; this presaged much of the socio-economic work being done in ALES today.

Yet throughout his manifold teachings and concerns, one thing surfaced again and again in Bentley’s preoccupations—a discussion on population and the need to control it. Like the 18th century scholar Thomas Robert Malthus, Bentley believed that human population, if left unchecked, would grow exponentially, whereas

food supply would only grow linearly. In other words, overpopulation was destined to create extreme human hardship as limited land availability would not be able to meet increased food needs. For Bentley, to know this and believe this meant to do something about it.

“My father had a huge sense of urgency,” his son, Ted Bentley, recalls. “There will soon be 9 billion people on the planet. How many people will have enough calories but not enough protein to reach full potential? He thought about that a lot because he truly enjoyed watching students reach their full potential, and he wondered if the playing field was level enough for most people in general to be able to reach their full potential.”

Early on, Bentley had concluded that agriculture—as practiced in most parts of the world—would eventually fall behind the pace of population growth, that it would not be able to



Fred Bentley, left, standing in between Prof. MS Swaminathan and Indian Prime Minister Indira Gandhi at the official opening of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). Bentley was chair of the governing board of ICRISAT for 10 years.

COURTESY OF THE BENTLEY FAMILY



COURTESY OF THE BENTLEY FAMILY

“My father had a huge sense of urgency ... There will soon be 9 billion people on the planet. How many people will have enough calories but not enough protein to reach full potential? He thought about that a lot because he truly enjoyed watching students reach their full potential, and he wondered if the playing field was level enough for most people in general to be able to reach their full potential.”

— TED BENTLEY

keep up, and that the result would be huge social disruption because people would be starving. Ted Bentley has no trouble remembering how outspoken his father was about overpopulation. “Because of academic freedom, his beliefs about overpopulation didn’t impinge on him carrying out his research,” says Ted Bentley. “I remember one time in particular, when my father received the Alberta Order of Excellence. He stepped right up and said we should reduce the birthrate. The Archbishop of the Catholic Church was in the audience, but that never stopped him.”

Dr. Mick Price, former Chair of Animal Science and Professor Emeritus, still smiles when he thinks of Bentley. “My wife and I give money to the university and to other good causes. I always keep in mind Bentley’s guideline—will it help to reduce the human population?” Fred Bentley was a wonderful man, says Price, “and he thought about zero population growth well before it was fashionable. I remember when he was Dean of our Faculty he pronounced, ‘no one with more than two children

will be paid any more money!’” Bentley practiced what he preached, so to speak. He and his wife had only two children.

As alluded to earlier in the book, Bentley was also feared and renowned for his course in public speaking, Agricultural Communication. He believed a professional had a responsibility to be able to speak in front of large gatherings. One of his motivations for training agricultural students in the art of public speaking may have come from his desire to make sure the “country boys” didn’t appear to be “hicks.” Bentley knew full well that farm boys were smart and employed a lot of ingenuity in the daily workings of a farm, and he wanted to be sure that the “redneck” stereotype was not only challenged but changed. He was strict with his students, but he was always fair. He always kept his office door open and welcomed students at all times, but students also knew that the door to the classroom might be locked if they were late for class.

What Bentley might be best known for here at home is his pioneering soil



ENGAGED INTERNATIONALLY: Fred Bentley was deeply involved in international work, helping to establish educational institutions and research projects around the world. Here, he's on a CIDA Mission to China in 1983.



research at the Breton Plots. His soil experiments meant that he was out in the field, literally, talking with farmers as he did research. Ted Bentley has fond childhood recollections of driving around in a truck with his father while he was conducting experiments. "I'd been all over Alberta by the time I was an adult," Ted recalls. "It was great to go and meet the people in agriculture who were really building up the province. He interacted with the farmers, and if experiments worked, he'd let everyone know. One funny story I recall was when my father and his friend, Walter Harris, a chemistry professor, were researching sulfur deficiency in soil south and west of Wabamun Lake. One of the ways they tested was to inject radioactive sulfur into the ground and then measure its absorption rate in plants. Back then," Ted laughs, "they didn't have much knowledge about the health effects of radiation poisoning. My father and Harris had a 45-gallon drum full of radioactive sulfur in the back of their truck, and somewhere along the road the drum came free and spun into the ditch. Those were interesting times, in

the days before so many regulations came in."

Driving around the back roads of Alberta was not the only source of colourful anecdotes. "When he was Dean, he had to straighten a few things out," his son recalls. The Agriculture students had access to big toys, like trucks and tractors. Sometimes a full load of manure would appear on the Engineer's steps. While Dean Bentley didn't mind if the students were having fun, sometimes their pranks escalated into situations that proved unmanageable. Nonetheless, safely back at home he'd sometimes laugh about the capers. Ted Bentley remembers when some engineers put some methyl mercaptan on the tiles inside the Agriculture and Forestry building. "Humans can smell it in parts per billion," Ted laughs. For several weeks, the stench lingered.

But Fred Bentley was, ultimately, always about the work. In 1972, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) was established to help

developing countries in semi-arid tropical regions around the world apply scientific knowledge and methods to increase crop yields and improve farming systems for small farmers, and ultimately to reduce poverty. Bentley was deeply involved with ICRISAT and was president of both the International and Canadian Soil Science Societies.

A knowledgeable scholar and, perhaps more importantly, a compassionate man, Bentley lectured widely on farmland deterioration and its adverse effects for the welfare of future generations and their food supplies. Bentley had a strong moral compass that drove him to search for ways to help impoverished people develop sustainable and independent food sources.

Over his career, Bentley received more than 40 national and international awards. In 1985, he spearheaded the establishment of the International Board for Soils Research and Management (IBSRAM) and was its first chairman. The undertaking was so successful it attracted support from the Canadian International



SOILS RESEARCH: Fred Bentley was a soils scientist who conducted research at the Breton Plots, above, and around the world. Two pictures of him are with his soil science colleague, Jim Robertson.

COURTESY OF THE BENTLEY FAMILY

The list of his accomplishments is almost too lengthy to detail, but it's worth mentioning, at the very least, how instrumental he was in pioneering ALES' current penchant for international cross-disciplinary collaboration.

Development Agency (CIDA) and other countries. A true champion of environmentally sustainable agriculture, the University of Alberta's annual Bentley Lecture in Sustainable Agriculture was created in his honour. The list of his accomplishments is almost too lengthy to detail, but it's worth mentioning, at the very least, how instrumental he was in pioneering ALES' current penchant for international cross-disciplinary collaboration. He was involved in establishing an agricultural university and a vocational agricultural college in Northern China, in planning a genetic resources bank for West Africa and in providing an assessment of national agricultural research capability in the francophone countries of West Africa. He also led a CIDA team dry-land agriculture project in Pakistan and served as a consultant for Canadian government agencies, the United Nations, the World Bank, and numerous private organizations.

Fred Bentley was inducted into the Alberta Order of Excellence in 1987. He received the University of Alberta's Honour Award in 2002, and in

2008 he received the University's most prestigious award, The Distinguished Alumni Award, which recognizes remarkable graduates and Alumni who have achieved outstanding success in their career. Even in his last days he was working on solutions. Fenton MacHardy visited Bentley in the hospital near the end, and he remembers that Bentley had a makeshift desk set up against the curtain separating his bed from his neighbour's, no doubt so as to work on yet another project to make the world a better place. Fred Bentley passed away in April 2008 at the age of 94, but his work continues on in the lives of those he touched. ■

Excerpted from A Century of Solutions, by Curtis Gillespie, a book that chronicles the first 100 years of the Faculty of Agricultural, Life and Environmental Sciences. The book will be printed in October 2014.

To pre-order your copy for \$20.00 plus shipping and handling, go to www.ales.ualberta.ca or www.ales100.ales.ualberta.ca.

WHAT TIME IS IT?

IT'S
BAR NONE
TIME!

NOVEMBER 15, 2014
SHAW CONFERENCE CENTRE

RECEPTION & DINNER 5:30 P.M.

TICKETS \$70, young alumni \$35 (*graduated after 2003*)

Please RSVP by Friday, November 7th

COME CELEBRATE WITH YOUR FELLOW
ALUMNI, FRIENDS AND FACULTY MEMBERS!
MEET THIS YEAR'S BAR NONE ENDOWMENT
FUND SCHOLARSHIP AND AWARD WINNERS.

FOR MORE INFORMATION, PLEASE CONTACT LISA BOWKER:
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www.afes.uofalberta.ca and click on the Alumni and Friends tab.



UNIVERSITY OF ALBERTA
FACULTY OF AGRICULTURAL,
LIFE & ENVIRONMENTAL SCIENCES

Forging a FACULTY

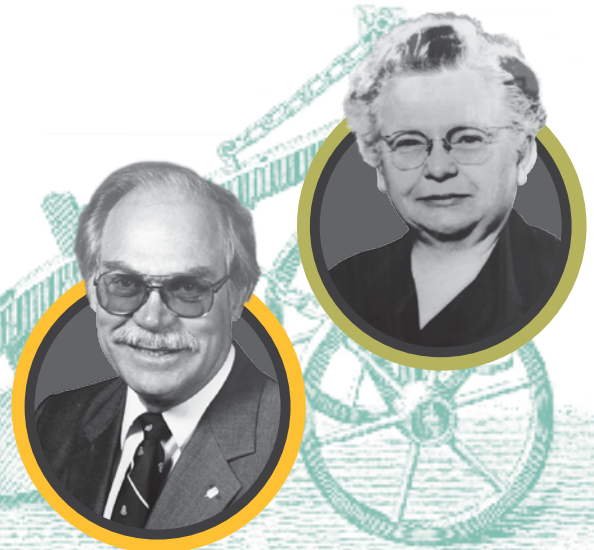


ERIC PHOTOGRAPHY

A university faculty is forged by people: students who learn and go on to contribute their skills to society, faculty and staff who dedicate their careers to educating our sons and daughters, researchers who seek to provide solutions to challenges we face on local and global scales, and administrators who create and nurture the environment to make it all possible in the first place.

The Faculty of Agricultural, Life & Environmental Sciences has had its share of prominent builders, discoverers and alumni. In the pages that follow are a very small sample of people who have helped shape the faculty in what it is today: a place where students learn and are challenged inside and outside the classroom to become meaningful and contributing citizens; a place where world-class researchers provide solutions to global challenges; a place where alumni have received their education and gone on to do great things; a place that is fully engaged in a spirited conversation with and about the world around us!

BY MICHEL PROULX AND KATE BLACK





The BUILDERS



E.A. Howes

Ernest Albert Howes built a faculty in the middle of a war, and continued fighting battles of his own to put the Faculty of Agriculture — which would eventually become the Faculty of ALES — on the map.

With no facilities and only one other staff member, Howes was named the first dean of the Faculty of Agriculture in 1915. The main focus of the faculty was teaching students how to increase farm productivity. At the time, agriculture was considered more of an art than a science and Howes was particularly adamant about showing students and the public the importance of applying science to agriculture. The faculty grew quickly. In 1916, a beef and dairy barn was built on land west and south of the current University Hospital, and experimental plots were laid out close to the main campus. Nine departments were established between 1915 and 1928: Horticulture, Field Husbandry, Animal Husbandry, Veterinary Science, Soils, Agricultural Engineering, Dairying, Entomology and Poultry Husbandry.

In the summer of 1918, Howes traveled to Ottawa to plead the case for starting an agriculture program just for soldiers returning from the war. Nearly 500 men ended up taking courses in Animal Husbandry, Field Crops, Soils, Horticulture, Dairying, Poultry, Blacksmithing and Carpentry. Among his other accomplishments, he successfully argued, repeatedly, against moving the faculty off main campus, and he led the movement to remove the obligation for students to wear gowns to class.

Howes served as dean of the faculty until his death in 1940.

Mabel Patrick and Elizabeth Empey

The Department of Household Economics was established in 1918, a time when professional training for women was not widely encouraged. Though “household science” was taught at the university through the Department of Education since 1914, the actual department was spearheaded by Mabel Patrick immediately after arriving at the U of A from Manitoba Agricultural College. It was established under the Faculty of Arts and Science.

Named associate professor of household economics in 1931, Patrick was director of the School of Household Economics from then until 1956. Patrick also served the University as a contributor to the Department of Extension and CKUA lectures, and as director of Dietary Services (1958) at the University of Alberta Hospital.

A student who attended the School during Patrick’s tenure took the Household Economics program to new heights. Elizabeth Empey, who graduated with her BSc in Household Economics from the U of A in 1943, was appointed Director of the School of Household Economics in 1959 and promptly expanded the School’s degree offerings. Under her leadership, three new programs were created: Food and Nutrition, Clothing and Textiles and Family Studies, resulting in a swell in student enrolment and faculty and staff members. In her final year in 1976, she oversaw the School’s transition to a faculty and became its first dean. By the time she stepped down as dean in June of that year, student enrollment had reached 374 undergraduate students and 23 graduate students.

Gordon Ball and Travis Manning

Responding to the farming community's desire for more offerings in farm economics than was offered by the University's Department of Economics, the Faculty of Agriculture hired Gordon Ball, a Canadian who had been working at Iowa State University. Under the impression he had a mandate to create a new department, Ball put forth a proposal, with the full support of the Farmers' Union of Alberta, to establish the Department of Agricultural Economics and Farm Management.

The proposal was rejected by the university. Ball resigned in protest. Farmers' groups expressed their outrage and the university reconsidered. The department was established the following year, in 1961. In 1962, Travis Manning was hired out of the Federal Reserve Bank of Kansas City to head the new department.

Fondly known as "The Chief," Manning began laying the framework for a graduate program as soon as he started. In 1963, he began allocating resources to stack the department's staff with capable researchers, solidified a research program and established the MSc program in Agricultural Economics. In 1967, a PhD program was created.

Manning earned a reputation as a visionary, guiding the first years of the department to leave a lasting legacy in addressing poverty issues in rural and developing areas, examining the business and social aspects of agriculture and the changing trends in economics and sociology. Manning stepped down as Chair in 1974 and stayed with the department as a professor until his retirement in 1983.



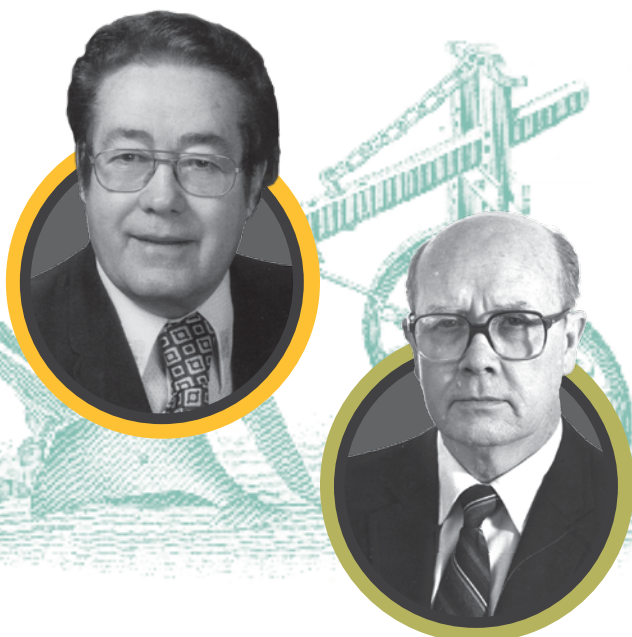
Jim Beck and Peter Murphy

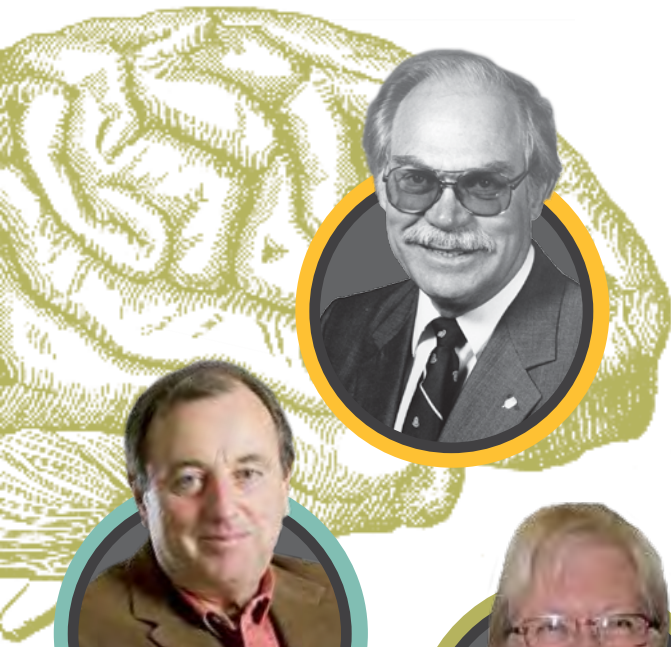
In 1970, huge swatches of northern land were being forested, yet no forestry program existed in the prairies. So, then dean of the Faculty of Agriculture, Fenton MacHardy, made the controversial decision to marry agriculture and forestry under one faculty — a common move across the globe, but nearly unheard of in Canada.

Jim Beck and Peter Murphy were enlisted to grow the budding Department of Forest Science from the ground up, with Beck hired as an Assistant Professor in 1971 and Peter Murphy hired in 1973 as the department's Acting Chair, replacing Jack Shultz, the founding chair who left one year after being hired.

The two sought for the program to focus more on forest resource management and the social values of water, wildlife and recreation, rather than simply harvesting fibre — another novel idea for Canadian forestry education. Beck notes that the idea was "heresy" at the time in Canada.

But, the risk taken in pushing an unconventional education worked out well for the department. Beck recalls employers from across the country, particularly in British Columbia, taking a special interest in U of A Forestry grads for their comprehensive knowledge of sustainable forestry management. In fact, almost everyone in the first graduating class had either a permanent job offer by the time of graduation or a contract offer of at least 12 months. And that's not all — in 2006, it was ranked the second-best forestry program in North America, just under the University of British Columbia, but vastly higher than the rest on the continent.





Making better beef

Roy Berg revolutionized the beef cattle industry in the late 60s with his innovative and controversial cross-breeding research.

When he was hired as an assistant professor in 1955, he wanted to improve fertility in cows and growth in bulls through selective cross-breeding. He got his opportunity when the university bought the 5,500-acre Kinsella Ranch to use as a beef cattle breeding facility.

Despite violent criticism from cattle producers who called his cattle disparaging names like “Berg’s Bastards” – some even lobbied the university to have him fired – Berg persisted. In time, his hybrid breeding program led to a 30 to 40 per cent increase in production, helping make Alberta a world leader in beef production.



The DISCOVERERS

Ensuring proper brain development through infant formula

Millions of people around the world can thank Tom Clandinin for the good functioning of their brain.

In the 1970s, it was generally accepted among scientists that the growth and development of cell membranes, especially in the brain, did not depend on anything the body ingested. Clandinin proved otherwise.

He was the first to demonstrate that the development of the brain could be altered by the types and amount of dietary fatty acid it ingested. Eventually, he determined the amount and types of fatty acids required for optimal growth of the human brain and shared that finding with infant formula companies who have brought this innovation to market in more than 65 countries.

Stopping the flames

You’ll be hard pressed to find loose and flowing children’s night clothes today, thanks largely to research conducted by Betty Crown. The retired ALES researcher demonstrated the dangers of loose, flowing nightgowns. She showed that closer fitting garments are safer because they don’t ignite as easily and air isn’t as readily available to feed the flames if they do ignite.

The federal government used the findings to change the Canadian Children’s Sleepwear Regulations which were later adopted, with some differences, by the U.S.

Crown went to help build the first flash fire testing facility in Canada and create safer working work clothes for workers in the energy industry and for forest fire fighters.



Saving an industry

As blackleg disease ravaged Saskatchewan's and threatened Alberta's canola crop in the 1980s, ALES researcher Gary Stringham used a relatively new technique, called the double haploidy technique, to breed new varieties of canola in about half the time it usually took.

He used the technique to develop, among others, his most famous variety, Quantum, which had a high yield and most importantly, was resistant to blackleg. The discovery literally saved the canola industry.

Stringham, like many other canola breeders, went on to develop other varieties that provided a higher yield along with the same resistance to blackleg. Indeed, today, the resistant gene Stringham found to resist blackleg is found in most varieties of canola.

Unraveling forestry's ultimate mystery

Seeing a clear cut forest in the boreal may soon be a thing of the past. John Spence and his colleagues have found that if small patches of trees and single trees are left standing in a harvested block, the ecosystem will be conserved

Forest researchers and managers have been trying to figure out how to harvest a forest for maximum economic value and yet also maintain the area's ecosystem and all its environmental, social and recreational values, including its biodiversity and wildlife. Spence's findings from his 100-year project, Ecosystem Management Emulating Natural Disturbance (EMEND), has provided guidance for forestry companies who have developed new forest management systems that are more ecologically and economically effective.

Valuing environmental goods and services

When damage occurs to a natural ecosystem, such as an oil spill or accidental forest fire for example, how do you assess the value of the environmental goods and services that will no longer be available while the damage is being repaired?

ALES researchers Vic Adamowicz and Peter Boxall have developed ground breaking methods to value the cost of environmental good and services by observing people's behaviour and calculating trade-offs individuals make between market goods and environmental quality.

The methods, which are being used worldwide, can be used to value the economic loss when damage occurs and, by the same token, they can be used to measure the added value resulting from environmental improvements.



EPIC PHOTOGRAPHY

Alex McCalla

Alex McCalla was catapulted onto worldly endeavours after graduating with his BSc in Agriculture from the U of A in 1961 and serving as the Students' Union president in his final school year. He was hired as a faculty member at the University of California at Davis, immediately after completing his PhD from the University of Minnesota in 1966. When he was 32 years old, only four years after being appointed at UC-Davis, he was appointed dean of the school's College of Agricultural and Environmental Sciences. Enrolment under his leadership expanded from 2,000 to 4,500 in five years. He then moved on to be the founding dean of the school's Graduate School of Administration, where he founded the Graduate School of Management — one of the top MBA programs in the world.



The

ALUMNI

Betty Jones

Fresh out of the Mexican economic crisis of the 1980s, the Tijuana general hospital was in disarray. It was the only hospital that accommodated children in the area, and a nursing shortage often left parents to care for their sick children themselves.

Enter Betty Jones. After receiving an undergraduate degree in Human Ecology at the University of Alberta in 1955, she earned a Masters in Public Health at San Diego State and was able to bridge her two degrees through a life-saving initiative.

Jones founded the Foundation for the Children of the Californias, a collaborative effort between Canada, the United States and Mexico to improve the health and nutrition of children in the area.

The organization developed the *Hospital Infantil de Las Californias* in Tijuana, Mexico, the first pediatric specialty centre in the area that offers free care to indigent children in the area. Since opening in 1994, it has conducted more than 350,000 medical consultations, 9,000 surgeries and 250,000 hours of education. In August, the organization, in partnership with Shriners Hospitals for Children, opened an ambulatory in the hospital, with services including orthopedics, burn, hand, ear and cleft reconstruction.



Grant Devine

This alumnus made the unlikely jump from humble agricultural beginnings to the Saskatchewan legislature.

Grant Devine earned an MSc in Agricultural Economics in 1969 and an MBA from the U of A in 1970. He taught at the University of Saskatchewan until he got involved in politics, and was elected leader of the provincial Progressive Conservative Party in 1979.

He became Premier of Saskatchewan in 1982 when his party defeated the governing New Democratic Party, winning 55 of 64 seats. Under his leadership, Saskatchewan reduced spending, curbed labour unions and introduced a three-year loyalty break to the oil industry but they still ran a deficit of more than \$1.2 billion between 1986 and 1987.

But not all was lost: while he was Premier, the PC government privatized the province's potash and uranium businesses and acquired two oil upgraders and the SaskFerco nitrogen fertilizer plant, the largest natural gas consumer in Saskatchewan and environmentally friendly in that it disposes wastewater on the site instead of in water resources.

Following his political career, Devine received the Saskatchewan Order of Merit, the province's highest honour.

Jay Hair

Throughout his career, Jay Hair butted heads with US President Ronald Reagan, brought wolves back to Yellowstone National Park and reduced the flow of toxic waste to the Great Lakes.

Six years after graduating with his PhD from the University of Alberta in 1975, he was recruited to be president of the National Wildlife Federation (NWF). Throughout his appointment, he redirected the groups' focus from being a fairly right-leaning protectionist outdoors club to influencing policy surrounding wider conservation and environmental issues. Throughout his tenure, which ended in 1995, the NWF's membership hit its all-time peak of 6 million in 1989 and became the United States' largest environmental membership organization.

Hair made his mark on environmental public policy at all points during his lifetime. He served as president of the International Union for Conservation of Nature, a global network of scientists and conservation professionals and also co-chaired a sector of former U.S. President Bill Clinton's Council on Sustainable Development. At the time of his death in 2002, he was the founding secretary general of the International Council on Mining and Metals of London, a group promoting the sustainable development of resources.

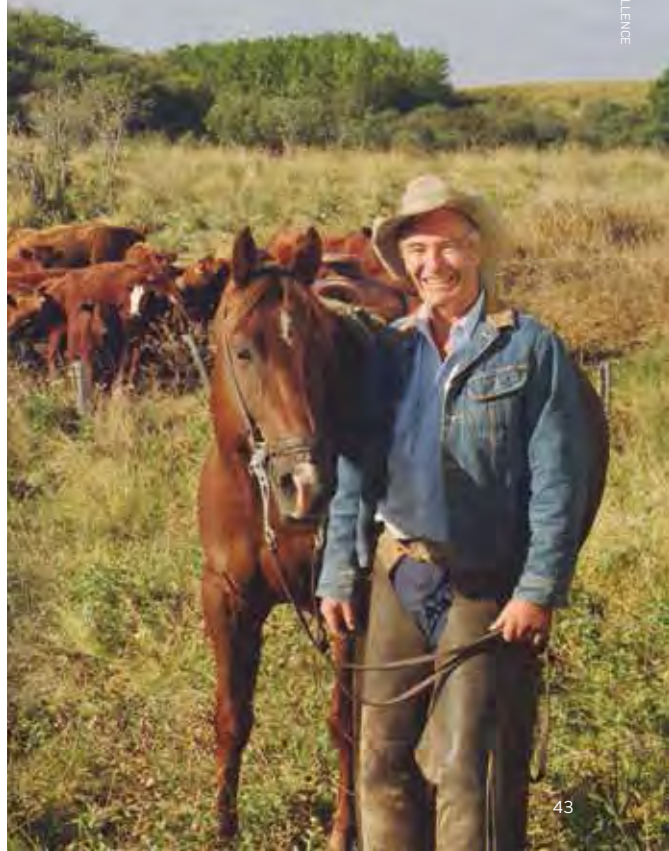
Bob Church

Bob Church is perhaps Alberta's most prominent scientist who moonlights as a cowboy. After graduating from the U of A with his BSc(Ag) in 1962 and his MSc in 1963, he got his MD and combined his passion for ag and science, primarily in genetics.

Early in his career, he played a major role in developing hybridization techniques that dramatically improved the ability to isolate genes. It made it much easier for scientists to handle small pieces of DNA, and ultimately lead to better genetic testing, the ability to genetically modify organisms, including plants and animals, and even breakthroughs in the treatment of various types of cancer.

Church played an equally major role in embryo development, developing the first livestock embryo transfer company in the world and playing a major role, with colleagues, in developing the first in-vitro fertilization program in Canada.

Church's list of accomplishments stretches far and wide, and also includes either helping to establish or participating in several research programs, including NSERC and the Alberta Heritage Foundation for Medical Research, among others.





COURTESY OF THE UNIVERSITY OF ALBERTA

STEN BERG

CLASS OF '54 BSc (Ag) ALUMNI AWARD RECIPIENTS

2012 - STEN BERG Known for his innovations in hog breeding and management, Sten's contributions are significant on a national and international scale. As chair of the Western Hog Growers Association, he connected with the Japanese market in 1962. Sten eventually launched his own consulting firm and served as chair of the Alberta Cattle Commission. He also served for a time as a councillor in Strathcona County.



COURTESY OF WENDA BRADLEY

HUGH BRADLEY



SUPPLIED

ROMAN PAUL FODCHUK

2011 - HUGH BRADLEY Hugh Bradley won the Yukon Farmer of the Century Award in 1999 for his tenacious will to overcome the challenges of farming in northern Canada. He operated the Pelley River Ranch, 300 km north of Whitehorse, which he bought with his brother and two partners the year he graduated. He and his family operated the ranch until his passing in 2012. Hugh also provided agricultural experiences to young people.

2007 - ROMAN PAUL FODCHUK

A landscape architect, author and cultural historian, Roman worked as a planning and interpretive design professional for the National Capital Commission and Parks Canada. He created the master plan for Alberta's Ukrainian Cultural Heritage Village, as well as Edmonton's Capital City Recreation Park. Roman also wrote 'Zhorna: Material Culture of the Ukrainian Pioneers', a highly praised work on Ukrainian material culture in Alberta.



COURTESY OF THE UNIVERSITY OF ALBERTA

JAMES A. LORE



COURTESY OF THE UNIVERSITY OF ALBERTA

BUCKLEY GODWIN

2004 - JAMES A. LORE James (Jim) served as president of both the Alberta Institute of Agrologists and the Agricultural Institute of Canada. A strong supporter of his community, he achieved recognition as an authority in resource development resolutions and land stewardship. He served as chair on the board of governors of Olds College from 1993-1996, and was Director of the Olds College Foundation.

2000 - BUCKLEY GODWIN Buckley returned to the University of Alberta to pursue a Bachelor of Education degree ('64), combining his love of commercial horticulture and teaching. He developed the dried ornamental and cut flower industry in Alberta, designed Canada's first horticultural college course and received numerous speaking invitations and awards from across the continent for his professional work.

THE AMAZING CLASS OF 54

BY ANDREA ROSS

"You guys think that you're hard done by and you worked really hard," says Agriculture class of 1954 alumnus Jim Lore as he recounts the words of a former professor. "You have. But for every dollar that you spent on your education, the Alberta taxpayer has spent 10.

"You owe that taxpayer a debt, and don't you ever forget it."

After 60 years and a successful career in farming and consulting, his professor's advice to the class lingers in Lore's mind. "I think quite a few of our class took that (advice) seriously," he says, reminiscing on a lifetime of successes.

Lore is one of the five among the 19 graduates of the Class of '54 who received University of Alberta Alumni Awards. When asked what has factored into the group's success, Lore laughs. "Good question."

Sten Berg, the most recent alumni award winner of the five, has a theory. "We were kind of unique. Our class was very much oriented towards the broader knowledge - the broader ways of how to disseminate and how to utilize information to the best of our advantage. It was an inspirational group."

In addition to Lore and Berg, Hugh Bradley, Roman Fodchuk and Buckley

Goodwin received Alumni Awards.

Lore believes his classmates fed off each other's passion and drive. "I think it was imagination," he says. "Guys like Sten Berg, Hugh Bradley, Roman Fodchuk... they were trailblazers, those guys. Buck Godwin, he designed the first college horticultural course in Canada. He's a very unassuming guy, but when he spoke, you should be listening, because he had something to say."

Ron McCullough speaks proudly of his classmates' successes and believes their alumni awards honour their contributions to society. "(Success) is a combination of many things," he says. "It's hard work, who you know, the luck you have, your timing... and how do you measure success? A lot of people measure it by monetary gain, but what you realize when you get older is that success is how well you served society."

Lore looks back and considers himself fortunate to have made a living doing what he loves. And nearly 60 years after graduating, the men remain in contact, celebrating their friendship, success and memories. "It was a very positive experience. There was a lot of good fellowship," says Lore. ♣

The Faculty of ALES notes with regret the passing of its following alumni:

LILLIAN FISHMAN

'36 BSc (HEC)
of La Jolla, CA, in August 2013

JAMES GEORGE DARROCH

'39 BSc (Ag), '43 MSc
of Honolulu, HI, in May 2013

CECIL OSCAR ANDERSON

'42 BSc (Ag),
of Kathyrn, AB, in August 2013

BERNICE MARY BALFOUR (Butteris)

'44 BSc (HEC)
of Vancouver, BC, in March 2013

MARION ELIZABETH HOLLINGSHEAD

(Pullar)
'46 BSc (HEC), in May 2014

GORDON ALEXANDER ROSS

'49 BSc (Ag)
of Victoria, BC, in June 2013

LAWRENCE ROBERT CANNING

'50 BSc (Ag)
of Vulcan, AB, in March 2013

WILDA MACKENZIE HURST

'50 BSc (HEC), in August 2013

EDMUND SAMUEL MARSHALL

'51 BSc (Ag)
of Calgary, AB, in May 2013

HOWARD LEROY SHARPE

'51 BSc (Ag)
of Mayerthorpe, AB, in March 2014

JOHN SIDNEY LORE

'52 BSc (Ag)
of Edmonton, AB, in April 2013

OSBORNE A. CLARK

'53 BSc (Ag)
of Sherwood Park, AB, in April 2013

JAMES ALBERT CARSON

'55 BSc (Ag), '58 MSc
of Edmonton, AB, in March 2014

EARL B. COOPER

'57 BSc (Ag)
of Sangudo, AB

KENNETH WILLIAM MORRIS

'57 BSc (Ag), '60 BDiv
of Lethbridge, AB, in May 2014

CARLA JEANNE BADICK

'90 BSc (Ag)
of Calgary, AB, in July 2013

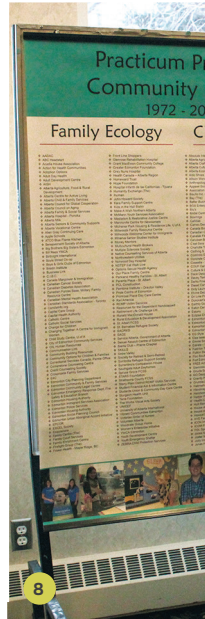
40

MILESTONE

PRACTICALLY 40: HUMAN ECOLOGY'S PRACTICUM PROGRAM CELEBRATES

It was more than 40 years ago that Dianne Kieran – convinced that family studies students in the Human Ecology program would benefit greatly from a practicum – established the program, which provides a practical experience for graduating students. Today, every Human Ecology student does a 200-hour practicum in the community, to acquire some experience before they graduate, under the guidance of the current Program Coordinator, Kathryn Chandler.

- 1 Kathryn Chandler, the program coordinator for the past 27 years, addresses the audience.
- 2 Three long-standing field supervisors who have mentored many students over the years: Brenda Davidson from the Edmonton Garrison, Laura Fulmer from the Terra Foundation and Joanna Johnston of Studio Theatre.
- 3 Assistant Professor Rhonda Breitzkreuz, in white, and Vlada Blinova, a lecturer and the manager of the Clothing and Textiles Collection, dressed in the striped shirt, stand in line with others.
- 4 Local architect Ron Wickman, an adjunct professor in the department and another field supervisor, chats with Professor Norah Keating.
- 5 PhD candidate Laurel Sakaluk and Assistant Professor Megan Strickfaden enjoy the light fare.
- 6 More than 60 people attended the celebration in Lister Hall.
- 7 Jennifer Smythe, an alumna and a practicum field supervisor from the Edmonton Community Legal Centre is in the forefront, while Assistant Professor Rhonda Breitzkreuz, alumna Sherry Ann Chapman and Professor Norah Keating have a conversation in the background.
- 8 Curious onlookers examine a collection of photos and the impressive list of the program's community partners since its inception in 1972.
- 9 Human Ecology Chair Deanna Williamson chats with Lida Lahola and Calli-Ann Rudiger, co-owners of Callidas and long-time field supervisors of the program.







COURTESY OF SAVE-A-VILLAGE

PROFILE

PAYING IT FORWARD

Human Ecology MSc grad finds her calling in Africa

BY ALEXANDRIA ELDRIDGE

Leslee Greenaway had just finished a three-week safari in Kenya in 2004 where she had witnessed some spectacular wildlife. But the images that stuck with her the most had nothing to do with lions, elephants, zebras and giraffes; it was the abject poverty in which people lived that touched her heart. As she wondered how she could help, a chance conversation would eventually lead the way.

Two days before flying back home, Greenaway had a conversation with a young African man who told her he had grown up in a small village near Homa Bay, one of the few local sites Greenaway's tour group had visited on the safari. He told her that the women's group in his village was looking for financial support for some projects.

Greenaway, a licensed realtor who graduated from the University

of Alberta with a BSc in 1978 and an MSc in design from Human Ecology in 1989, promised that she would try to help. She didn't have experience in charity work but true to her word, she returned to Kenya in February 2006 to do a needs-assessment of the village of Nyarut and area. What she found was that people were living without clean drinking water or adequate nutritious food. Their medical and educational facilities were grossly inadequate. She got to work raising funds to build what the villagers needed.

She started by giving presentations to interested groups and hosting small African dinner parties at home. She held afternoon teas and started writing grant proposals. Friends helped her prepare an 'Evening in Kenya' event with an African-menu dinner, a silent auction, and entertainment for 150 guests. It was a huge success.

A HELPING HAND: Leslee Greenaway, standing in the picture on the left, discusses the project with local stakeholders. ABOVE, members of the Emmanuel Foundation in front of one of two playgrounds they funded and built. BELOW, one the classrooms of the new elementary school.

The Alberta Distribution Relief Agency – Aid Society International (ADRA-ASI) came through with two containers of donated supplies and in 2007, Save-A-Village received a \$25,000 grant from the Alberta Government's Wild Rose Foundation. Eventually, with the help of friends, Greenaway raised the remainder of the \$90,000 needed, and Save-A-Village hired a local contractor to begin building in Nyarut.

They completed a nine-classroom elementary school and installed a rainwater collection system off the roof that serves eight villages with cleaner drinking water. They also used the funds to build a four-bed medical clinic with a pharmacy and an attached community hall. Many of the buildings were furnished with goods from the containers from ADRA-ASI and the Kenyan government has since provided a full-time nurse to the clinic.

The Emmanuel Foundation, a charitable organization with a mission to provide 'play' to children in needy countries, donated two state-of-the-art playgrounds to the Save-A-Village project. They visited Nyarut in 2009 to personally install the playgrounds that now serve 500 children at Nyarut and at the Nyangweso School for the Deaf. But it didn't stop there.

As the project grew, it was necessary to get more help. In 2010, Greenaway registered Save-A-Village: A Mission In Kenya Society of Alberta with the provincial government and found qualified individuals to serve as a Board of Directors. The same year, she adds, Engineering Ministries International, another charitable foundation, visited both village areas with Greenaway and worked with the

villagers to help them improve their food production and health through better agricultural, irrigation, and sanitation.

In 2011, Save-A-Village received another matching \$25,000 grant, which it used to build a school in a second village area, Nyangina. "The people here have been wonderful to work with and full of energy and gratitude to Canadians," says Greenaway. "This school now has four completed classrooms and proudly graduated their first class in February 2013."

The villagers have even begun expanding the school on their own, using donated and borrowed materials from their community.

"The walls are almost up. It is very exciting to see their strong community motivation," says Greenaway. "Their

school has not yet been provided with government teachers so the community has provided their own, with the parents contributing a small amount each month to pay the teachers."

The Save-A-Village project has been so successful that Greenaway had to put her career on hold in many ways. But it's not something she regrets. "My (real estate) career became part-time but I became so passionate about this project. There is such a great need and the work has been so rewarding. And there's so much more that still needs to be done," she says. ♣

For more information on the project, and to see how you can help, visit www.saveavillage.ca.



IN MEMORIAM

REMEMBERING DOUG SHEARER '51 BSc (Ag)

BY EV MCCRIMMON, '51 BSc (Ag)

One of Doug's favourite stories was that he was the last baby born in Waterhole, Alberta. The railroad had just arrived in his part of Peace River District and the railway station was at Fairview, a few miles north of Waterhole.

Doug and I had a close friendship that started in 1946 at the Vermilion School of Agriculture and continued at the University of Alberta where we were part of the Ag Class of 51.

Doug became a very successful business man. With a partner in Calgary, he developed a number of companies supplying the oil industry. One company was established in Switzerland to service the oil fields off the coasts of Norway and Scotland.

He developed strong contacts with companies in Japan. At one time Syncrude was having trouble finding enough steel in North America for its plant at Fort McMurray. Doug and a steel expert traveled to Tokyo and

signed a contract to provide steel to meet Syncrude's needs. Over the years Doug made so many trips to Tokyo that he bought an apartment in Hawaii so he could break up the trip to Tokyo, arriving fresh and ready for business.

When Doug and his wife Barb retired, they built a home in Mill Bay, north of Victoria, BC. Doug was a bit of a perfectionist about gardening. He sent more than 75 truckloads of soil to a plant that screened out all of the stones before the soil was returned to his garden. My wife and I home-sat for a couple of months while Doug and Barb were on a trip to Australia; I had very specific directions about what he wanted me to do in his garden.

There are many more stories I could tell about my wonderful friend Doug but there is no space for them. I simply close by saying this is a little bit about the life of the boy from Waterhole, Alberta. ♣



ALEXANDRIA ELDRIDGE

AFTERGRAD

EXACTLY WHERE I WANT TO BE

BY TYLER FLETCHER '10 BSc (Ag) AS TOLD TO ALEXANDRIA ELDRIDGE

Growing up on a mixed farm south of Warspite, Alberta, I always had a passion for agriculture. And while there are many job opportunities in the industry, I didn't always know the route I would take for my passion to translate into a career.

I finished my BSc (Ag) in December 2009, with a major in Sustainable Agriculture Systems. I travelled to Australia and New Zealand after graduating, and when I came back, I searched for a job that would allow me to draw on everything I had learned at the U of A and in my own background in agriculture.

I knew I was interested in becoming a land agent but I didn't exactly know how to get my foot in the door. I started cold calling people in the industry across the province. Eventually, I connected with a land agent who liked my background and experience and gave me the chance

to obtain my land agent's license while working for his company, after completing a distance-learning course through Olds College. I worked as a land agent for two and a half years, acquiring interest in land from farmers on behalf of the oil and gas sector.

Working with farmers every day was what I truly enjoyed about my job and I knew that I had found my passion. But I really wanted to get back into the agriculture industry. So in November 2012, I took my skills and experience to a new opportunity. I'm now a land coach and the VP of Agri-Trend Land Resources, part of the Agri-Trend group of companies. I run the day-to-day operations of Agri-Trend Land Resources, which assists farmers in the surface land acquisition process. And as a land coach, I get to be on the ground with farmers, assisting them in

understanding what they're signing and what the long-term implications of these agreements are going to be. It's the best of both worlds – being in the office and in the field.

At the same time, I work to maintain a good relationship with the energy sector to get agreements signed as quickly as possible. It's the perfect way for me to draw on my experience working for industry and my passion for agriculture and working with farmers.

This opportunity allowed my wife Laura and I to move back home and become more involved in the family farm. I'm well supported at Agri-Trend, where I feel we're growing something pretty big and pretty special and I'm excited for the chance to see it through. It may not be the career I pictured when I first came to the Faculty of ALES in 2005, but I couldn't be happier with where I've ended up. 🍀

ALES 100

Events

Opening Celebration

October 22, 2014

“LEADERSHIP IN PROVIDING SOLUTIONS TO GLOBAL CHALLENGES”

A panel discussion hosted by the Right Honourable Kim Campbell

Lois Hole: The Queen of Hugs Clothing Exhibit

September 2014 – March 2015

Centennial Lecture Series: J.G. O’Donoghue Memorial Lecture

December 2, 2014

Jason Clay, Senior Vice President of the World Wildlife Fund

Centennial Lecture Series: Bentley Lecture in Sustainable Agriculture

February 5, 2015

Jayson Lusk, Agricultural Economist

Centennial Lecture Series: Forestry Industry Lecture Series (FILS)

March 5, 2015

Richard Louv, Journalist and Author

Centennial Lecture Series: Empey Lecture

March 11, 2015

Dr. Carolyn Ducey, Curator of Collections at the International Quilt Study Center & Museum, University of Nebraska

Convocation

June 2015

An Evening at the Devonian Botanic Garden

June 26, 2015

Old Country Fair on Alumni Weekend

September 25 – 26, 2015

Bar None & Awards Reunion Dinner

November 2015

Details about these events and more can be found on our website, visit

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