Unraveling the mysteries of the forest
Watch how the Faculty of Agricultural, Life & Environmental Sciences is Preparing Students to Provide Solutions

Let our grads show you how they achieved their career goals starting with their U of A degree.

**Project Serve** – See how the faculty helps students gain practical experience through volunteering

**Human Ecology Practicum** – Follow three students as they go through the practicum and enter the labor market

Go to **www.ales.ualberta.ca** to see their stories.

www.ales.ualberta.ca
### Happenings

**6 Project Serve**
ALES students connect to each other and the community through volunteering.

**8 Awards**
ALES student engagement team wins big; Forestry team back on top; Student Manning Award winner chooses ALES.

**9 Faculty News**
Mamma Mia! ALES students learn all about the Mediterranean diet in Tuscany.

**10 Faculty News**
George Foxcroft calls it a career; Vic Adamowicz leads Alberta Land Institute research; Land reclamation students visit German sites; everything you ever wanted to know but were afraid to ask about ALES’ acronyms.

**11 Discoveries**
Glue made from chickens and canola; finding rare species in Alberta; tracing meat products and; helping break the cycle of poverty.

### Features

**12 The Practicum Edge**
Human Ecology celebrates 40 years of providing students with real-world, hands-on experience in the community before they graduate.

**16 The Story of Milk Fats**
Twenty-five years of faculty research on milk fats has had a profound effect on our understanding of the long misunderstood compounds. Today’s research continues to deepen our knowledge of the link between the fats and our health.

**20 Creating the Forest of the Future**
100-year EMEND experiment places Alberta and Canada at the forefront of sustainable forestry practices.

---

*Building on research conducted by John Kennelly and others, ALES researcher Spencer Proctor is making significant scientific progress in understanding the relationship between milk fats and its effects on our health.*

*Researcher creates glue made from chickens. See page 11.*
Celebrating our Centennial

In 2015, the Faculty of Agricultural, Life & Environmental Sciences will be celebrating its 100th anniversary! We are very much looking forward to celebrating this remarkable milestone with you.

It has been an extraordinary century. What we’ve accomplished has been the direct result of the tremendous efforts put forth by past and present faculty, staff and students. Collectively, they have left a remarkable legacy for the university, this province, this country and indeed, the entire world. It is people who have made ALES what it is today and we particularly want to celebrate the relationships that have existed and continue to exist between our alumni and the faculty.

To ensure our centennial celebrations recognize these connections, we have inserted a survey which I urge each of you to complete and return in the pre-stamped return envelope. We would like your input on possible centennial events and projects and seek your thoughts on other ways to make our celebrations of particular relevance to you. (Alternatively, you may fill out on the online version of the survey at www.ales100.ualberta.ca)

If you would like to volunteer, please be sure to indicate that in the survey. One way you can contribute to the centennial is by sharing your stories and photos about ALES with us.

We will soon be launching a centennial website and one of its sections will be devoted to sharing the experiences of alumni, current students and past and current staff. We welcome your thoughts and perspectives on how your time in the faculty contributed to your personal and career development. Please take a few moments to jot down a memorable experience from your days at ALES, to reminisce about past classmates or colleagues, or to send us photos from your time in ALES. Your stories and photos can be sent to the editor (greenhouse@ales.ualberta.ca) and he will ensure they are captured for the memories section of the centennial website.

If you have any other comments or suggestions with respect to the ALES centennial celebrations, as always, feel free to e-mail me (john.kennelly@ualberta.ca) and/or the editor. I look forward to hearing from you.

JOHN KENNELLY
DEAN
FACULTY OF ALES
Remembering Roy Berg

I very much enjoyed the article on the late Dr. Roy Berg in the recent edition of greenhouse. His research was without a doubt “leading edge” though highly controversial. But there was the passionate teacher in him that was also innovative and refreshing.

I recall, with fondness, his unique approach to senior beef genetics; he made the students teach themselves! No lectures, no note-taking, just a series of weekly seminars in which two or three students would review scientific papers and lead his supervised discussion of the content. This taught us to read scientific literature with a critical eye, and not to automatically accept it as truth. This style of teaching has become much more popular over the years but I believe it was Dr. Berg who got it started, at least in my experience.

His approach to extension events was highly entertaining. I attended the 1979 Stockman’s School in San Antonio, Texas, where Dr. Berg was one of the featured speakers. The School was structured so that a number of lectures ran concurrently with each being repeated several times. Over the course of the event, attendance at his lectures grew and grew as word of this outspoken Canadian spread among the students.

There are a couple of “Bergisms” that have stayed with me over the years. For example, “Do you recommend hoof trimming in the beef cow herd?” Berg’s response, “Yes! At the hock, on the rail!” “Do you allow cesarean births in your research herd?” Berg’s response, “Definitely! But the knife used to perform the caesarean should be the same one that castrates the sire!”

Yes, the legacy of Roy Berg certainly revolves around his research, but my personal memories go far beyond that. Being exposed at a young age to this thoughtful and compassionate educator/researcher was truly one of the highlights of my time at the U of A, and benefitted me throughout my career as an agrologist.

Dale F. Engstrom
’72 BSc (Ag), ’88 MSc

Thank you for sending me the recent issue of greenhouse with the article on Roy Berg. It brought back a lot of memories. I had been lucky to visit Roy at his home a few years ago. I was one of his first graduate students, I’m quite sure I was the first to do work at the Kinsella Ranch. Roy definitely was the one who set me off on my wonderful career in animal genetics.

I was an undergraduate in Ag from 1956-60 (the year after Roy arrived). I then returned in 1961 and completed an MSc in 1963 under Roy’s supervision. I expected to follow on in beef genetics but the professor I was going to work with at Nebraska left the institution, so I accepted an offer from Purdue University to study basic quantitative genetics (mice), completing my PhD in 1966. This was one of those opportunities that just come along but you jump on them.

Does that sound like Roy Berg?! I accepted a position at University of California, Davis, where I remained until retirement in 2003 after a wonderful career working in trout and salmon genetics (opportunity!). I thank Roy for his vision, determination and integrity, qualities essential for a productive scholarly life.

Graham Gall
’60 BSc (Ag), ’63 MSc

Of international experience and confusing acronyms

Just read the latest issue of greenhouse. Good job. International exposure for students is a great objective. To keep Canada competitive in the future we need to know what the challenges of the world are and how we as Canadians can help address them.

As a side note, and a bit tongue in cheek, I have the acronym ALES figured out and it does not have anything to do with Lou Gehrig’s disease, but I am still working on REES. With (Reg) Norby and (Murray) Hawkins involved it has something to do with Rural Economy. I know it’s been 35 years and I maybe have not kept up with all the changes that have taken place.

Keep up the good work.

Henry Vos

Editor’s note: See page 10 for guide to acronyms.

We welcome readers to submit letters to: greenhouse, 2-14 Agriculture/Forestry Centre, University of Alberta, Edmonton, AB, Canada T6G 2P5 Fax: 780-492-8524 Email: greenhouse@ales.ualberta.ca

Letters should include the writer’s full name, address and home telephone and may be edited for purposes of clarity and space.
Project serves up connections between new students, their studies and the community

By Michel Proulx and Alexandria Eldridge

It was not only the first of its kind in the Faculty of ALES, it was the first of kind at the U of A. Saturday morning, 8 a.m., and more than 90 students are gathering in the pit in the Agriculture/Forestry Centre for ALES Project Serve Day.

“Project Serve aims to enable first- and second-year students in the faculty to make connections with each other but also between what they’re studying and what happens in the community,” said Shannon Clarke, the student engagement coordinator in the Faculty of ALES who organized the event.

About 75 first- and second-year students were led by 20 upper-year students who accompanied them to one of nine organizations in the city to perform three hours of volunteer work related to their studies. The locations included the Campus Food Bank, the Edmonton Food Bank, the Edmonton Reuse Centre, the Green & Gold Garden, the Hope Mission, the Mustard Seed, the River Valley Clean-Up, the Whitemud Equine Learning Centre Association and Youth Empowerment & Support Services.

Johanna Buchmann-Duck, a first-year Environmental Studies student, went to the Edmonton Reuse Centre, a city facility that resells gently used donated items back to the community for a flat rate of $5, thereby diverting things from the landfill.

“I can actually go out and say that I’ve made a difference as opposed to just sitting in a chair in a classroom.”

Johanna Buchmann-Duck
First-year Environmental Studies

“It was really amazing. It’s important to get hands-on experience,” said Buchmann-Duck. “I can actually go out and say that I’ve made a difference as opposed to just sitting in a chair in a classroom.”

First-year Animal Health student Kyrsten Janke volunteered at the White-mud Equine Learning Centre Association where she and her fellow student volunteers mucked out stalls, painted fences, fed horses and learned about biosecurity measures closely related to their program.

“You have to know how to apply your knowledge. It’s not good enough just knowing this disease or that disease, you have to know how to prevent (and treat) it,” she said.“(WELCA) is doing amazing things … and it’s cool just to be a part of that. I got a chance to connect with the community and other students.”

Sydney Haubrich, a 4th year nutrition and food science student who was a team leader at the Green & Gold Garden,
a two-acre community garden on South Campus, said she was
told by many younger students in her group that they were ex-
cited that they met new people.

“Because of today, they might see a
familiar face on campus in the near fu-
ture and now they feel they’re part of a
larger community,” she said.

After their volunteer experience, the
student leaders led the students in their
groups in a discussion about their expe-
rience before heading back to the Ag/
For Building for lunch and more discus-
sions about the day.

“Our goal was 50 students. We got
75 first- and second-years and 20 upper-
year students,” explained Clarke. “That
tells me that students really crave the
opportunity to get involved in their com-
munity and to be involved in general in
their undergraduate studies.”

Look for the second annual ALES
Project Serve Day next year.
Forestry team brings it home

After a night of intense competition, it came down to one final question, with the championship and a year’s worth of bragging rights hanging in the balance. Tied 4-4 against its arch-rival from UBC, a U of A forestry team waited for the judge to start asking the question and just went for it.

“Coleman didn’t wait for the question to be finished,” said Ross Hobbs, a third-year student on the team. “He just raised his hand and luckily, he knew the answer!”

And with that quick, razor-sharp reaction, the U of A forestry team won the celebrated Quiz Bowl, held at the annual Canadian Institute of Forestry Conference. It marked the return of the U of A as champions, a title often battled for against UBC.

“Coleman didn’t wait for the question to be finished,” said Ross Hobbs, a third-year student on the team. “He just raised his hand and luckily, he knew the answer!”

And with that quick, razor-sharp reaction, the U of A forestry team won the celebrated Quiz Bowl, held at the annual Canadian Institute of Forestry Conference. It marked the return of the U of A as champions, a title often battled for against UBC.

“They have a role as global citizens. If students begin to think critically about social issues and find ways to weave that experience into future plans, we know that they’ll leave us as people who will take action to provide solutions to global challenges.”

ALES student engagement team wins President’s Achievement Medal

The faculty’s student engagement team of 14 faculty members and staff earned the President’s Achievement Award “Dare to Discover” for its work to deepen experiential learning opportunities for its students, both locally and abroad.

More than 50 students examined issues of food security, poverty, human rights and sustainable agriculture in an international setting last year thanks to several ALES international community service-learning programs. Through these and other programs, more than 600 hours of community service have been given by students, staff and faculty locally and globally.

The team hopes students graduate from the U of A with a deeper understanding of themselves and their potential to contribute to positive social change, said Shannon Clarke, the faculty’s student engagement coordinator.

“Champions again: ALES forestry team Coleman Brinker, Nicole Luchanski, Ross Hobbs and Pierre Aubin strike their winners’ pose.”

1st year student takes prestigious national award

A healthy dandelion sprouting through road pavement triggered a thought in Kelcie Miller-Anderson, a first-year ENCS student, about the potential of a different approach to remediating tailings ponds of Canada’s oilsands industry. The result was an experiment conducted in her basement that earned her national recognition for innovation and a $4,500 prize from the prestigious Manning Awards. Miller-Anderson was one of four students in Canada to win the prize.

Kelcie Miller-Anderson

Winning team: The ALES student engagement team on stage, accepting their 2012 President’s Achievement Medal.
ALES students experience the Tuscan life

By Alana Willerton

“Can my life get any better than this?”

The thought passed through third-year Nutrition student Kylie McLean’s mind more than once this past spring during her three-and-a-half week stay in Cortona, Italy. In fact, she thought it almost every day.

As one of seven Faculty of ALES students taking the course entitled Mythical, Agricultural and Nutritional Origins of the Mediterranean Diet in the Tuscan region of Italy through the University of Alberta’s School in Cortona program, McLean thought she’d be spending her spring semester abroad simply learning about the history and nutrition behind the Mediterranean diet. What she got instead was the classroom experience of a lifetime.

Being in Cortona meant the students were able to have a hands-on class experience unlike anything they’d ever imagined, travelling to vineyards, olive orchards and local farms that produced cheese, fruit and herbs on a daily basis. Guided by the farm owners

The students witnessed the entire process of each food from start to finish, from where it came from to how it ended up on their plate. They often walked to the local market to buy freshly picked fruit and went on weekend trips such as to a gelato festival in Florence.

Combine that with the breathtaking views and it’s no wonder that some students like fourth-year Nutrition student Laura Adam couldn’t believe their luck. “Waking up in Cortona every morning was like you were in a dream,” she gushes. “You were on a hillside town that looked over Tuscany and it felt like you were flying all the time. The colors were amazing; there were red poppies, green wheat fields and yellow canola. Some days you’d be in the clouds and you couldn’t see down below, and some days you could just see so far and you could see everything.”

“It was completely different than being in a lecture hall at the U of A in Edmonton, Alberta,” McLean added. “It was just such good experiential learning experience. I don’t think I would’ve been able to learn that stuff that well out of a textbook, it’s just not the same as seeing it firsthand.”

The trip was led by ALES professor Dean Spaner, who described the stay in Italy as “the best teaching experience of my life.” It’s proof of the effect of the Cortona class experience, changing not only the way staff and students looked at food and how it was made, but the way they looked at themselves as people too.

“I definitely had second thoughts about going,” Adam admits. “I shouldn’t have been worried about anything. I’m so glad I did it. I would do it again tomorrow.”
Swine expert retires

After a distinguished 40-year career that saw him ranked as the second highest academic in Canada within the agricultural sciences field, George Foxcroft retired last summer.

The professor of swine reproduction physiology came to the U of A from England in 1988. “It represented the greatest uncontrolled experiment of our lives,” he said. “By any measure, the success we have enjoyed as a family, as well as the material and other legacies of the R&D program it was possible to create, speak volumes about the great opportunities provided by Canada.”

Among his career highlights were being the Canada Research Chair in Swine Reproductive Physiology, serving as Co-Director of the NSERC EmbryoGENE Strategic Research Network, receiving the Award for Excellence in Genetics and Physiology from the Canadian Society of Animal Science and publishing 184 peer-reviewed publications.

Land reclamation students get first-hand look at German reclamation issues

In the first of what will become annual tours, students and post-doctoral fellows from the Land Reclamation International Graduate School (LRIGS) visited industrial sites and land reclamation areas in the eastern part of Germany last September.

The tour provided students with a first-hand look at some of the reclamation issues in Germany. The group visited many industrial sites including a coal mine, an artificial water catchment area, a reclaimed uranium mine and a former tin mine, among others, after attending the two-day Helmholtz-Alberta Initiative Science Forum in Potsdam, Germany. The event, which alternates annually between the U of A and Germany, provides an opportunity for students and researchers from academia, government and industry to share research progress and results.

“Stakeholders use the venue to make everyone aware of breakthroughs in technology and it’s also a great opportunity to network with colleagues in Germany and develop new collaborations,” said Anne Naeth, who spearheads LRIGS.

The school, the only one of its kind in the world, officially accepted its first students last September. It has three MSc students, two PhD students and two post-doctoral fellows, some from Canada and some from abroad. The school continues to actively recruit graduate students and post-doctoral fellows.

GTAITFOA – Guide to acronyms in the Faculty of ALES

There’s no shortage of acronyms at the U of A and the Faculty of ALES is no exception. The faculty used to be called the Faculty of Agriculture, Forestry and Home Economics, the result of the addition of the forestry program in 1971 to the then Faculty of Agriculture, founded in 1915, and the subsequent merging with the Faculty of Home Economics in 1993.

In 2007, the prevailing thought was that the faculty name needed to be updated as it didn’t resonate at all with at least one very important stakeholder, potential students. After a thorough debate, it became the Faculty of Agricultural, Life & Environmental Sciences, or ALES.

It’s composed of four departments, which are commonly referred to as AFNS, REES, RenR and HE.

AFNS = Agricultural, Food and Nutritional Science
REES = Resource Economics and Environmental Sociology
RenR = Renewable Resources
HE = Human Ecology

Adamowicz to lead land institute research

ALES researcher Vic Adamowicz, an environmental economist in the Department of Resource Economics and Environmental Sociology, will head the Alberta Land Institute’s research program.

Focused on identifying solutions to Alberta’s key land-use challenges, research priorities include supporting the economic and social viability of agriculture while increasing environmental performance on the land base, with a focus on irrigation, infrastructure and identifying potential enhancements to the governance and regulatory framework required to increase land stewardship within Alberta and Canada.
Glue of the future

An adhesive created by using the protein of spent hens or canola could be the glue of the future.

With a patent pending, ALES researcher Jianping Wu is in the process of commercializing the adhesive he created using the protein of canola meal leftover after oil extraction, usually used as a feed additive or fertilizer, and spent hens that would otherwise be disposed of in landfills.

Most adhesives currently being used on products are petroleum-based. “(They) are not sustainable or environmentally friendly,” says Wu who believes protein-based adhesives are the way to go.

A popular protein-based adhesive made from soy beans is sold in the United States but Wu contends his product, meant for interior application on items like doors and furniture, is more robust, although not quite yet on par with synthetic adhesives.

New tool helps find rare species

A new tool to predict and map where rare species are likely to be found has been developed by ALES researcher Scott Nielsen of the Department of Renewable Resources.

The Alberta Species Conservation Atlas capitalizes on data from the Alberta Conservation Information Management System, which collects its data from expert observers across the province. It is then pooled together with models of climate, topography and moisture regimes to predict where habitat for rare species is likely to occur.

The tool can be applied to identify priority sites for conservation offsets, avoidance and restoration. Such information is invaluable for companies looking to map critical habitat on leases, conservation groups that are looking to ensure representation of habitat in conservation areas or government planners seeking to implement the conservation goals of Alberta’s Land-use Framework.

— Matthew Pyper

Canadians willing to pay for increased traceability of meat products

Despite having a “reasonably high level of confidence” in the safety of food in Canada, an increasing amount of Canadian consumers are asking for better traceability of meat products.

In a study conducted in Canada, Japan and the U.S. by ALES researcher Ellen Goddard of the Department of Resource Economics and Environmental Sociology before the XL Foods’s beef recall in September 2012, more than 50 per cent of people surveyed said they would be willing to pay more for a beef product if it could be traced back to its farm of origin.

In Canada, traceability of food products is only done from the farm to the slaughter house. Goddard says the Canadian and provincial governments have come a long way in terms of enhancing traceability but cost and the need for extensive record keeping have prevented a system from being fully implemented. She believes that this could soon change as the government begins to realize the importance of traceability in places like Japan, an important market for Canadian meat exports.

— Willerton

More help required to break cycle of poverty

After following 17 parents for a year as they were attempting to get employment through Alberta’s welfare-to-work initiatives, ALES researcher Rhonda Breitkreuz found that although participants were initially excited about the promise of self-sufficiency through employment, the reality was disappointing. While nine out of the 17 participants had jobs by the end of the year, all but two were still living below the poverty line.

If governments are going to be successful in transitioning welfare recipients to employment, they need to pay more attention to factors beyond job skills that preclude labour-market attachment, including low-paid, temporary jobs without benefits, inadequate public transportation, and a lack of quality and accessible child care, Breitkreuz said.

She added that while some steps have been taken by the Alberta provincial government in recent years to address those barriers, more needs to be done, including addressing the issue of low wages.

Welfare-to-work initiatives have been in place in Alberta since 1993.

— Willerton
THE PRACTICUM EDGE

Human Ecology students get hands-on experience in the community before they graduate

By Michel Proulx

Stephanie Brezinski and Kelsey MacDonald are feeling pretty good. The 4th-year Human Ecology students have just had their first class of the course that is preparing them and 24 of their peers for their 200-hour practicum, which they will do, along with every other Human Ecology student, before they graduate.

“I really felt a sense of relief after this first class because there are so many questions about graduating, about whether or not we’re going to get a job, and I have friends and family who are saying, ‘Where are you going? What are you going to do?’ so I really think this class will help us all have a sense of calm and really realize what we want to do,” says MacDonald.

The level of anxiety among students in the class is not exactly palpable but it’s there. Some of them are feeling the pressure, as much from themselves as from their friends and family.

“My dad is really concerned,” says Brezinski, chuckling as she explains. “He calls my mom pretty much every day. He doesn’t really understand what Human Ecology is. He’s always asking her, ‘Is she going to get a job? What kind of job?’”

He takes some comfort in the fact his daughter will be doing this practicum and getting some experience before she enters the labour market in a few months.

The Human Ecology practicum started 40 years ago and was pioneered by Diane Kieren. A sessional lecturer in the late 60s in what was then the School of Home Economics, Kieren served as the family studies content expert on the committee that was planning to evolve parts of the general three-year home economics program into a four-year family studies program.

“I was convinced family studies would benefit a great deal from building a practicum into its programming,” she says. “We are a practical field. We work with families, not just study or talk about them. Practice is an important part of our work.”

Her belief stemmed in part from her own experience during her training to become a home economics teacher. “The opportunities I had to practice in the classroom were invaluable to me both as I looked for employment and as I gained confidence as a graduate of an undergraduate program.”

After a few years of planning, the new four-year family studies program, led by Kieren who had been hired as the chair of the division of family studies, was first offered in 1971-72, complete with a practicum for fourth-year students. They were assigned to work for a full term in an agency or organization that worked with families. The students also attended weekly seminars to process some of their experiences and share them with classmates.

The practicum that Kieren developed, evaluated and for which she found placements and assigned students, was getting the results she had hoped for. “(Students) began to identify their own special skills in working with ‘real people’ and families and also identify areas that they needed to improve. Close contact with both a faculty and community adviser gave them time to develop relationships with those people and to discuss relevant issues in their practice. Some students discovered that this kind of work just wasn’t for them or (certain) aspects of the work weren’t their forte. That was helpful too.”

Forty years on, the program has expanded significantly and the benefits to students are as important as ever.

It’s a beautiful, sunny May morning in Edmonton and Brezinski is eager to get started. It’s the first day of her practicum, which she will do at the Excel Society. She will spend the next five weeks working with non-verbal adults with disabilities. While she has worked with autistic children during her studies, working with adults is something new for her.

Meanwhile, out in Toronto, MacDonald prepares to go to work for an organization.
called Fashion Takes Action, a public relations company located in a small, older building in the city’s famed Distillery district. The company promotes sustainable fashion and MacDonald will help organize events and provide marketing support to the team.

Both young women are feeling pretty good. Brezinski points out that much of what she’ll be doing at the Excel Society is what she wants to do for her career. “It’s a great opportunity. I’m confident I’ll be able to get something, even if it’s not with them.” MacDonald is equally self-assured. “I really believe this practicum will help get me where I want to go and give me the work experience that is so much needed to get a job in this field,” she says.

Both are as prepared as they could be. Just like their classmates in the preparatory class, they have met with their practicum supervisors at least once, often more. In class, they completed assignments related to the work they’ll be performing, discussed their fears about the practicum, ethics, conflict resolution, giving and receiving feedback, motivation for practice, professional boundaries and what healthy professional relationships look like. They also developed learning goals and did a placement site profile, investigated the organization, its mission, philosophy, how it operates, what its rules are and the larger community context within which it operates. It’s the kind of in-depth preparation and work one would do before interviewing for a job.

Their degree of preparation and confidence is a point of pride for Kathryn Chandler, the practicum coordinator for the past 25 years. “By the end of the course, I always hope they are feeling more confident and more ready for their practicum. Field supervisors (those who supervised the students in the different locations) tell me… human ecology students are more ready than other students that they work with. It’s very gratifying. It’s a real compliment to the students as well.”

“I love when students use the practicum as an opportunity to explore and test themselves in a new area.”

Kathryn Chandler
Practicum Coordinator

Human Ecology, a department within the Faculty of Agricultural, Life & Environmental Sciences since 1993, has two major streams, family ecology (the successor to family studies) and clothing, textiles and material culture. As the Human Ecology program evolved, so did the practicum since its inception 40 years ago. It offers the same opportunities for students in both streams.

Before their first practicum preparation class, students will have filled out an application, informing Chandler about what they want to learn and what skills they’d like to develop during their practicum. Chandler then usually finds them a placement based on their interests and the organization’s needs but occasionally, students go to her with their own ideas. “I have this bank of organizations that we’ve worked with for many years but I can’t possibly know all of the places out there that would make a great practicum placement so I happily work with students if they’ve got an idea, a contact, a place they want to go. The placement sites have to meet certain criteria. Not every idea works out really well but the majority do,” she says.

Typical placements for family ecology students like Brezinski are in non-profit
social service agencies where students would help run programs, especially planning and implementation. Examples include Terra Association, Catholic Social Services, multi-cultural health brokers, the Immigrant Centre for Women and family centres.

“Students are designing programs, they’re implementing programs and they’re often life skills-related programs that will help their clients,” explains Chandler. “They’re helping individuals and families improve the quality of their life.”

Clothing, textiles and material culture students like MacDonald are often placed in businesses, boutiques, fashion-related businesses, apparel manufacturers and museums.

“They do a wide range of things, buying, merchandising, visual merchandising,” says Chandler. “They go on buying trips with their field supervisors. The ones in museums will do documentation of artefacts, research-related work.”

While the overwhelming majority of placements are in Edmonton, there are always a few placements every term that are somewhere else, including Montreal, New York City, Milan, London, Nepal and South Africa, to name a few.

**Days before finishing her practicum,** which she found a little overwhelming at first, Brezinski is excited and nervous.

“I got a job,” she says. She was hired by another social service agency and will be starting the following Monday. She says that while she’s nervous about starting her new, permanent, full-time job, she gained more confidence from the fact she was able to adapt pretty quickly to interacting with non-verbal adults with disabilities. “It was different but I learned a lot, especially about the power of being there for someone and the ability to read and interact with people who have limited communication skills.”

In her new job, she’ll also be working with adults with disabilities but they will have a greater ability to talk. “I’m nervous but I think everything I’ve done has so far prepared me for it.” Her parents couldn’t be happier for her, especially her father.

MacDonald has just returned from her practicum in Toronto, where she says she had the time of her life. “I got to do so much. I got to write up corporate sponsorship pitches, news releases and I also put together databases of suppliers Fashion Takes Action might use in the future. I got to send out lots of professional emails so I think I learned quite a bit when it comes to that.”

During her time in Toronto, she received an unexpected call from Servus Credit Union, where she had worked part-time for a year as a spokesster for its Young and Free Alberta program, which tries to connect 18 to 25 year-olds with the credit union.

“They really wanted to work with me again. They figured I could do the job, especially with my degree now. They called me up, offered me the job and the rest is history,” she says, smiling broadly. “I blog and tweet and do all the social media for the program. I also run all the marketing behind it, including planning events.” She adds that one of her colleagues in the marketing department is also a Human Ecology graduate.

**Chandler couldn’t be more delighted** for them. “I love when students use the practicum as an opportunity to explore and test themselves in a new area. Use the practicum to do some different work, take you farther, take you in a different area. Expand your scope and abilities. That’s what these students have done. Stephanie worked with adults with disabilities for the first time during her practicum. Kelsey enhanced her marketing and other public relations skills.” She pauses. “That’s just great!”
THE STORY OF MILK FATS

Long-term research in faculty deepens understanding of milk fats’ health effects

By Connie Bryson

M oney was tight in John Kennelly’s 1950s childhood home but there was one issue on which his mother would not compromise. She always made sure visitors were offered butter, not the new and cheaper product, margarine. “She would have been embarrassed if butter wasn’t on the table,” recalls the dean of the Faculty of Agricultural, Life & Environmental Sciences who points out that in those days, there was a tension between the cachet of butter and the lower cost of margarine that played out in many kitchens and dining rooms. Butter was the loser as consumption declined in most western countries.

In the 1980s, butter took another hit as health authorities warned people to stay away from animal fat. Consumers listened. Over the years, animal fat as a percentage of the total caloric intake in North America declined significantly. Interestingly, the expected concomitant health benefits did not materialize as obesity and diabetes rates skyrocketed. Researchers like Kennelly began to wonder about milk fats—were they really that bad?

In the mid 1980s, Kennelly’s team at ALES was part of a major scientific effort to study the composition of milk fat. They uncovered a complex story: milk has over 400 different fatty acids, which combine in many ways to make up the thousands of different types of fat present in milk.

One of the fats that attracted a lot of attention was conjugated linoleic acid (CLA), an unsaturated trans fatty acid that is naturally present in dairy and beef. Unlike the harmful hydrogenated trans fats created through industrial processing, naturally occurring CLA has significant health promoting properties, including potent anti-cancer activity. In Canada, governments, researchers and the agrifood industry looked to capitalize on the health and economic opportunities CLA presented. Albertans took the lead and in 2001 formed the CLA Network, a collaborative team of research, food industry, health and communications professionals. There was excitement when John Bell – the current assistant chair of the faculty’s Department of Agricultural, Food and Nutritional Science (AFNS) who was then a graduate student of Kennelly’s – developed a diet for dairy cows that resulted in a ten-fold increase in the level of CLA in milk. The mass production of CLA-enriched milk seemed to be around the corner.

As work progressed, the CLA network gained a new member, Spencer Proctor, a cardiovascular scientist from Australia. Supported by a prestigious award from the National Health and Medical Research Council of Australia, Proctor and his family had relocated to Edmonton for the two-year term of the award. He first worked in the Faculty of Medicine and Dentistry and then was appointed to ALES’ Alberta Institute for Human Nutrition. “I guess I’m a bit of a cliché—I came for two years and so far, we’ve been here for 10! Soon after I arrived in Edmonton, I connected with people in AFNS and I was invited to join the CLA network. The collaborative nature of the network was a big attraction for me. I was intrigued by the potential health benefits of CLA and I was interested in learning more about CLA enrichment from the perspective of the primary producers. Most biomedical researchers don’t have an opportunity to work in this kind of environment.”

The opportunity was crystallized for Proctor during a conversation with Kennelly who noted that when diets were changed to produce meat and dairy with more CLA, another key fatty acid—vaccenic acid, a trans fatty acid that both humans and cows convert to CLA—was
also increased. “But we knew virtually nothing about vaccenic acid,” adds Proctor. “It became very evident that we had to start asking questions about whether vaccenic acid was good or bad, as well as additional natural trans fats. The picture was bigger than CLA. This was the turning point for my research.”

Kennelly couldn’t have been happier. “While I was thrilled that we could get a ten-fold increase in CLA, I was also concerned about the increased levels of vaccenic acid, which is the single most abundant trans fat in milk. I had this constant worry in the back of my mind: Would vaccenic acid come back to bite us? I was so glad when Spencer turned his attention to this issue.”

Instead of being a bad thing, vaccenic acid and other natural trans fats are looking like a boon for human health. Proctor tests the effects of natural trans fats using rats with a genetic abnormality that predisposes them to obesity and diabetes. “This is a model for accelerated cardiovascular disease,” he explains. “When we study vaccenic acid in early diabetes and insulin resistance, we test it in this model to see if it will help. This way, we not only learn about vaccenic acid but also about cardiovascular disease.”

In animal trials, Proctor’s team found that feeding natural trans fat was associated with a major lowering of triglyceride levels and a modest lowering of both total and LDL (low density lipoprotein) cholesterol levels—all key risk factors for cardiovascular disease and other health problems. His team also demonstrated that natural trans fats have a substantial impact on the intestinal absorption and secretion of lipids. These findings point to the potential for diets with enhanced natural trans fats to help reduce risk factors for cardiovascular disease.

Proctor is now extending his research to humans and he recently won a grant from the Canadian Institutes of Health Research to study vaccenic acid effects in humans. “We’ve been collaborating with a group in Quebec that has created dairy preparations with high vaccenic acid but we’ve been limited in doing clinical trials because Health Canada regulations are quite restrictive. I’m excited to move this research forward into humans.”

As a cardiovascular researcher, Proctor is keen to understand the mechanisms behind the different health effects of natural trans fats and industrial trans fats. His lab has already had a major scientific success in determining how vaccenic acid leads to lower blood lipids and to the redistribution of fat. While this work continues, Proctor is stepping out of his comfort zone as a researcher to become an advocate for policy change concerning food labelling and trans fats. Currently, all trans fats, whether good or bad, must be listed on product labels.

“The research we’ve done shows that natural trans fats have positive biological effects and should not be lumped in with the family of trans fats that are produced during industrial processes,” he says. “That’s why the clinical work in humans is so important even though it’s not really the main focus of my research. Clinical results are needed to make the case with Health Canada about current trans fat legislation. This has implications for the whole food labelling process and the dairy sector in Canada.”

As part of his advocacy work, Proctor’s group and industrial partners have launched a website, www.naturaltransfats.ca, on which consumers can learn the difference between natural and trans fats and their health implications.

Proctor points out it’s unlikely that his scientific work on natural trans fats and his policy advocacy would have happened had it not been for the CLA network, his connection to Kennelly and the research he had conducted in the Faculty of ALES, and their influence on the early years of his career. “I know people sometimes think that since we don’t see CLA-enriched products on store shelves, the research was a dead end,” he says. “On the contrary, it’s been revolutionary. The CLA network sparked the study of natural trans fats and laid the groundwork for the changing perception of milk fat.”

Kennelly likes to come back to butter, noting that per capita butter consumption in the US has been on the rise since 2001. “There is a shift in the attitude to milk fat. It’s hard to put your finger on what caused it exactly but I can’t help but think that the research on the composition of milk fat, the research on CLA, the CLA network, and Spencer’s work on natural trans fats has all come together and is a positive message for the animal sector.”

Of course things don’t change overnight, he adds. It took a generation for people to think milk fats were bad, it’s going to take at least that long for the pendulum to swing the other way. Kennelly is unconcerned.

“No matter the time frame, the understanding of milk fat is a game changer for the industry.”

Better milk: John Kennelly stands with a mixture added to cow’s feed in one hand that resulted in substantially higher levels of CLA and unsaturated fatty acids.
Dr. Tara Fenwick  
Visiting Scholar, Stirling University, Scotland

Experiential Learning:  
New avenues of exploration

In celebration of the 40th anniversary  
of the practicum program of the  
Department of Human Ecology

March 6, Noon - 1:00 pm  
in the Lister Centre, University of Alberta

A panel presentation will take  
place following the lecture

Delivered in conjunction with the  
Festival of Teaching

The Empey Lecture is delivered annually in honour of Dr. Elizabeth Empey, Dean of Home Economics at the University of Alberta from 1960 to 1976. The lectureship commemorates the many contributions made by Dr. Empey to the profession of Home Economics and Nutrition. Public lectures are delivered on issues related to Family Studies, Material Culture, Clothing & Textiles or Nutrition.
CREATING THE FOREST OF THE FUTURE

Ground-breaking, comprehensive forest experiment sheds light on the mysteries of the boreal forest and how best to manage it

By Michel Proulx

In the early 90s, John Spence and Jan Volney, a senior research scientist with the Canadian Forest Service, were standing in a buffet line at a forestry dinner behind Frank Oberle, then a senior forest manager with Daishowa-Marubeni International (DMI). Oberle turned around to face the pair and said, “Hey, how would you guys like to help us organize a landscape experiment up north?” Although overwhelmed by the size of such a prospect, the ever-courteous Spence asked him what he had in mind. Oberle talked about an experiment that would compare forest patches that were burned with forest patches that were cut at a landscape level in the pursuit of sustainability. Volney was excited. “What a gift,” he thought. Spence, however, was unmoved.

He kept saying to me, ‘there’s an opportunity here, we should do this.’ I started to see the opportunities, how I could use this to do some very interesting entomology and how at the same time I could be involved in an effort to deal with some of the doubts I had.”

The first doubt was about partnering with industry. A forest entomologist with the Faculty of ALES, Spence is a university professor’s university professor. He loves scholarship, he loves conducting science and above all else, he loves teaching students. He was sceptical about industry-sponsored research. In fact, for the first decade and a half of his career, he deliberately avoided industry funding. “I didn’t want to be in anybody’s pocket in terms of money. I wanted to be able to do my science in my own way and report the findings openly and unfettered,” he says. On one particular occasion, he had gotten wind of the fact that someone from industry who hadn’t appreciated a research finding that Spence had published, had tried to get him cut off from funding for future projects through a provincial government program.

His other major doubt had to do with the prevailing school of thought in Alberta forestry circles at the time. Forestry companies had been looking for some time to make their practices more sustainable, to move away from clear cutting large swaths of forest. Several companies, and many researchers too, embraced the idea that if harvesting could mimic fire (or natural disturbance as it is referred to in forestry), sustainability would be achieved. Spence thought the idea was just plain stupid. “Fire and harvest are not equivalent things so the idea you just match the scale and pattern of forest harvest to the scale and pattern of fire doesn’t make any sense,” he says. And yet no one was really testing what was being commonly referred to as the natural disturbance paradigm. Oberle’s offer provided Spence with just such an opportunity.

But there was also another, more important, reason that compelled Spence to pursue Oberle’s proposition. Under the right circumstances, it would allow him to do a whole host of interesting things in forest entomology and link it in some really tightly connected ways to forest ecology and educational opportunities for graduate students. Considering all that, and the fact that his interactions with Steve Luchkow at DMI and Tim Vinge
EMEND in action: Of all the positive aspects of EMEND, John Spence is especially enthusiastic about the opportunities the experiment provides students. PhD candidate Seung-II Lee looks for beetles with Spence in the foreground while Post-doctoral Fellow Jaime Pinson searches for the same little critters in another tree. Meanwhile, Matthew Pyper, who recently completed his MSc, searches for beetles in a ground trap while MSc student Sonya Odsen looks and listens for birds and MSc student Jared Amos searches for bees, wasps and hornets.
at Canfor, both U of A-trained foresters, convinced Spence those companies were seriously interested in improving the environmental impact of their operations through applied science, the offer proved too tempting to resist.

Thus was born EMEND – Ecosystem Management Emulating Natural Disturbance – one of the most comprehensive forestry research experiments in the world, located on a 1,000-hectare site about 90 km north west of Peace River, Alberta.

After overcoming his concern of collaborating with industry, other partners beyond DMI, the University of Alberta and Natural Resources Canada (Canadian Forest Service) were sought. The Government of Alberta joined in the experiment as did Canfor and the Foot-hills Model Forest. Later, Weyerhaeuser and Manning Diversified also joined and made significant contributions in areas aligned with their strategic interests.

EMEND started operations in 1998. It was designed for a full 80- to 100-year rotation and seeks answers to one very simple yet very big question: how do we get the economic resources from the forest in a sustainable way while maintaining the integrity of its ecosystem, including its biodiversity and wildlife, and also keep it a safe and desirable place to go for recreation? To tackle these big questions, a number of research scientists from ALES’ Department of Renewable Resources and the Canadian Forest Service became involved as co-operators in the project.

The question was and remains just as significant for forestry companies as it is for research scientists. “We realized that we needed to have some retention on the landscape to support habitat for the little critters, we just didn’t know what level to leave and, of course, every time we leave something in the forest, it actually increases our cost,” explains Jim Stephenson, Canfor’s operation manager.

At first, EMEND research was conducted on 100 operational-sized plots but as the findings are being applied by DMI in its current operations, EMEND has expanded to be truly a landscape level experiment, as originally envisaged. The experiment represented a change in philosophy in how forests should be managed. “This is about getting at what the right answers are and implementing those,” said DMI’s Steve Luchkow, who until his recent retirement, played a major role in EMEND.

Ten-hectare plots with different tree compositions were harvested to a variety of green tree retention levels or burned to different prescriptions in order to learn how new harvesting and regeneration approaches compared with the natural disturbance of fire. What became clear fairly quickly was that harvesting does not mimic fire. It simply can’t. The ecological processes at work are different. However, what also became clear was that it was possible to minimize the differences between harvesting and fire, or to otherwise accommodate critical processes associated with fire. Suddenly, it wasn’t about emulating natural disturbance anymore as much as it was about being inspired by natural disturbance.

“You need to understand the legacies,” explains Spence. “Harvest that leaves legacies behind, that are crucial parts of ecological processes, that kind of harvest actually happens at the stand level. If you can manage that sort of stuff, there is some basis for the idea that if we look to natural disturbance and try to manage those critical legacies in the same way, then we achieve something useful. With clear cuts, of course, we weren’t doing any of that.”

Important legacies they found included the amount of biomass left on a site, including green trees and deadwood. “We didn’t understand very well the importance of deadwood for biodiversity elements and we think, in the long term, you leave those trees not only as a silvicultural system but as a way to re-seed critical resources like coarse woody materials so all of the biota associated with that coarse woody material stays in the system as the forest recovers,” explains Spence.

Early results also showed quite clearly that there is no threshold of tree retention in a cut block which will guarantee the on-site preservation of a population of insects or, for that matter, most other taxa. Ellen Macdonald—another ALES researcher and a major collaborator on the project—and her students have found that populations of some forest understory plants can hang on under certain kinds of re-

**Beetle catcher:** Post-doctoral Fellow Jamie Pinzon checks the window trap set to catch beetles while John Spence looks on. Pinzon will be a major contributor to the major synthesis of EMEND’s first 10 to 12 years that is expected to be published in March 2014.
tention prescriptions. Armed with that information, the researchers shifted their research focus from strict preservation to defining thresholds for persistence and to recovery of populations after harvest. The conservation question being asked became: what level of biomass retention is required to ensure a population’s recovery (rather than its preservation)?

The answer is, as it is with all ecological attempts to establish thresholds, it depends. Fauna and flora will change dramatically if 10, 15 or even 20 per cent of trees are left standing in a cut block. Even if there’s 75 per cent retention, wildlife communities will change. “There’s no practical threshold of harvest above which you will have no effect. You will always have an effect,” explains Spence.

What the research has uncovered is that aggregated retention, leaving small patches of trees, allows the possibility to preserve some aspects of the biota locally, after harvest. EMEND has been working on finding out what those thresholds are for a number of taxa. Bigger patches leave something closer to the pre-harvest conditions. Smaller patches leave an effective fauna but still preserve some populations of the pre-harvest conditions. What seems to be getting clearer is that a combination of aggregated and distributive (leaving single trees) retention is the best option.

“We have a critical range,” says Spence, “so from a management perspective, you have to decide what your objective is and act accordingly. If you want to retain populations of some of these beetles that are sufficient to re-colonize landscapes, then you have to leave big enough patches. The good news is you don’t have to leave them everywhere.”

The result is that today, some companies are producing cut blocks in northern Alberta that are dramatically different than they used to be. “Instead of seeing a clear cut, which doesn’t have any trees sticking up, what you’ll see now are clumps of trees that are left behind so instead of having all that wood removed from the area, you have some green trees, some dying trees, some dead trees and you get a lot of the legacy elements, if you will, that you find in a natural forest, especially one that is being burnt,” explains Volney.

The results are producing guidance for forestry companies about what they should leave in a cut block, what their targets ought to be on the land base in general, what the mix of distributive and aggregated retention should be, what the patch sizes and distribution of patch sizes should be not to preserve but to conserve the fauna and the ecological function on sites.

“We’ve been able to design new management systems that are more effective ecologically and economically, which is great,” says Tim Vinge, who was heavily involved in EMEND as a forest ecologist with Canfor and now works for Alberta Environment and Sustainable Resource Development. He adds that the most important economic benefit resulting from the research for companies that adopt and apply the management implications of the experiment’s findings is the enhanced social license to operate, which keeps markets open for Canadian products.

“I think we’re doing as much as is possible to do to understand how in the long run, we can do extensive forestry in Canada that gets our forests pretty much back lock, stock and barrel to the conditions they were in before harvest and before they’re harvested again,” adds Spence. “That’s the objective here in Canada. Nobody else does that. We are about the only ones in the world that do that. We’re trying to have our cake and eat it too. It’s a pretty hard thing to do but I think we’re...”
“...doing pretty well at developing systems to use the fibre resources we have in a way that conserves biodiversity.”

The project is also unraveling other mysteries of the forest and how it functions. For example, ALES researcher Sylvie Quideau’s lab is looking at soils and soil functions. It has discovered that there is a cycle of microbes in the soil of upland sites but it’s unknown how much it has to do with the way nutrients are cycled and the long-term productivity aspects but that question will be answered.

The experiment is also yielding a carbon database above and below ground. Spence believes it is the best empirical database about carbon for any place in the boreal, perhaps even the world. “I think that’s going to have big implications for the way we decide about carbon credits and that sort of stuff in the long run.”

Right now, data collection at EMEND has been suspended while Spence and his colleagues create a major synthesis, going back to their original questions, looking at all their data and deciphering what they’ve learned. “We’re trying to basically build a platform from our first 10-12 years, which will then allow us to go forward into the next steps, well-rooted in what we know and what we don’t,” he says. He hopes to have the synthesis published by March 2014.

Looking back on the first 12 years of this unlikely journey, Spence is grateful for the lessons he learned about the benefits of team research for ecological projects, the amazing people he has met and worked with on the project, including his U of A colleagues as well as government and industry personnel and, true to form, especially for the opportunities it has given him to help educate the next generation of forest scientists. “That part was very attractive to me and that’s been better than I imagined.”

He adds with some understandable pride that there are a lot of things they’ve learned that are important. “I don’t claim that we have a final answer yet but we have a lot more information and a lot more ability to do things that are useful than we had 15 years ago.”

If EMEND continues to unfold as hoped for, the vision of provincial government forest ecologist John Stadt, a longtime EMEND collaborator, may prove prescient. “I would hope that the work we’re doing today, in terms of trying to create forests of the future that are intact ecologically and can provide for a wide range of values, that they’ll continue to be there for our children and our children’s children. And I would hope that forest managers way in the future would look back on the people who set up and initiated the EMEND experiment and say, ‘I’m glad they had the foresight to make that investment because it’s sure providing for the things we need today.’”

---

**EMEND by the Numbers**

| 1,000 | Hectares on the EMEND site. It’s equivalent to about 1,200 football fields |
| 100 | Years the experiment is designed to last |
| 45 | Graduate students who have worked at EMEND |
| 160 | Undergraduate students who have worked at EMEND |
| 1,460 | Species studied |
| 8 | New species discovered |
| 7 | Active partners |
| 12 | Active researchers |
| 64 | Scholarly papers published as a result of research conducted at EMEND |

---

*left - Forestry in the old days: Example of a clearcut forest taken from Finland. Clear cutting was a common practice in Canada up until into the 1990s. Note that no patches of trees or single trees were left.*

*right - Forestry as a result of EMEND: An example of a DMI harvest block inspired by the experiment’s findings. The company uses a combination of distributive and aggregate retention (single trees and patches of trees left standing) to conserve the fauna and ecological function of the site.*
Class of ’62 creates travel award
The Class of ’62 is leaving a legacy.
Leighton Mellemstrand shared the idea of funding an award for current students with his classmates during their reunion at the Alumni Weekend last September.
“I just kind of sprung it on people so they didn’t have time to think on it,” he laughed. But the simple question compelled a number of the Golden Roundup Ag ’62 classmates to commit enough money to establish the Class of ’62 Travel Award.

Mellemstrand says he hopes to get the award off the ground as soon as possible and maybe present it as early as next year.

The Ag Class of ’62 gathered at the house of one of their own, John Buma and his wife Olga, in Sturgeon County last Alumni Weekend, to mark a special milestone.
“We just felt, being that it was 50 years (since graduation), we better get together or we might not have a chance. We’ve already lost 10 classmates out of 33, so we’re running out of people,” said John Lockhart. “It was great.”

For Lockhart, the reunion was a fitting conclusion to a project he had been working on since March, a 60-page booklet entitled Golden Roundup Ag ’62 with entries from former classmates about their lives since graduation, as well as a class history.
“It’s a pretty classy publication,” says Leighton Mellemstrand, who along with Lawrence Barany and Bob Church, assisted Lockhart.

For Mellemstrand, having his classmates’ stories in writing and becoming reacquainted with them through reading was extremely meaningful.
“You have a concept of what [people] were like when going to university of course, and then you read some of this stuff, and it’s kind of neat, that they’ve gone on to this or that. It’s just plain interesting.”

“To sit down and actually put it in print was far more meaningful, because you can take it and read it and go back to it […] It’s neat to have,” he added.

Despite the large amount of work that went into the project, it was well worth it for Lockhart, who says it was rewarding to reconnect with everyone he remembered from his school days. As he explained, over the years, people lose track of each other, even if they’re not separated by distance.
“We actually had a very good group, working together, and we kind of drifted apart over the course of our working careers.
“It’s strange that we might live in the same city and not realize that classmates lived around the corner or down the street or across town. Most of us kept track of two or three and that was about the limit,” Lockhart added.

But on the occasion of their 50th anniversary, the classmates became reacquainted once again and rekindled old friendships.
A procession of 65 respectful, thoughtful, sorrowful people wended their way ever upward to the summit of our Ag classmate Hugh’s ‘little 800 ft. mountain,’ overlooking his picturesque Pelly River Valley and Ranch, 300 km north of Whitehorse.

They are relatives and friends gathering from across the Yukon and Canada to present their tributes and stand, tearfully, to witness his well-used old tool box from the binder containing his ash remains, suspended on binder twine, being lowered into his beloved earth. Many brought symbolic articles to place in his grave before closing: oats, grasses, poppy seeds from Buck’s garden, a comely potato, wildflowers. Then a tall oat stook was placed as a visible marking for his associates and First Nation friends passing on the river and for those continuing life at the ranch, to see and remember.

An hour’s drive back up the river, we arrived at Pelly Crossing. Selkirk First Nations had requested the privilege of staging a traditional potlatch in honour of Hugh. Two-hundred and fifty friends were welcomed at the traditional aboriginal ceremony, followed by supper. The afternoon ceremony contained a lengthy outpouring of tributes, many tearful, as locals, Selkirk members, friends and relatives from ‘away’ acknowledged Hugh and his wife Wenda’s remarkable history of sharing, generosity and teaching. Wenda was a health nurse at Pelly Crossing and had earned their love and respect, before marrying Hugh in 1997.

Hugh had earned the enduring respect of Selkirk First Nation members for his generosity and sharing since his purchase of the ranch in 1954, with partners brother Dick, Buck Godwin and John Stelfox. While Hugh always seemed to go the extra mile, he was celebrated in both the Yukon and nationally. He won the Yukon Farmer of the Century Award in 1999, the Commissioner’s Award for Public Service in 2004 and a University of Alberta Alumni Honour Award in 2011. Other notable achievements included the significant recognition he received from the Selkirk First Nations Chief and Council over the years, and making a presentation with his brother Dick at a Circumpolar Agriculture Conference in Sweden in 2004.

This writer felt honoured to experience this unending wonderful hospitality as we gathered to grieve the loss of a worthy friend of 65 years, a most memorable four days in an exciting lifetime! Somehow, we came to a little closer understanding of the things that really matter in our own lives!
ALUMNI WEEKEND

The Golden Roundup Class of ’62, otherwise known as the Ag Class of ’62, and the Human Ecology Class of ’62 each celebrated their 50th anniversaries during Alumni Weekend 2012. Both classes held dinners to celebrate the golden occasion the evening before the annual ALES Alumni brunch, which this year took place at the Hotel MacDonald. More than 200 ALES alumni, friends and family joined host Dean John Kennelly who provided an update on faculty activities, including the increasing efforts and increasing successes the faculty has experienced in engaging students in various extra-curricular community-service learning opportunities at home and abroad. He also announced the faculty is beginning to plan for its centennial celebrations, which will take place in 2015, and invited alumni to submit ideas and volunteer to make the occasion as grand as it should be.
Born and raised on his family’s farm in Wetaskiwin, Alberta, Maurice Hladik has been fully immersed in the world of agriculture since he was a child, often stacking hay, hauling grain or running the tractor. He seemed destined to carry on the family tradition of farming but fate had a different plan for him.

After completing his BSc (Ag) at the U of A in 1966, Hladik pursued his masters in Agricultural Economics at UBC. Realizing that a return to the farm would likely mean a future as a hired hand – given there wasn’t enough farmland to support two families and his father wasn’t anywhere near retirement – he decided to pursue other options.

As he was writing a government exam, he was asked to write the Canadian Foreign Service exam. He had never heard of it but he and a friend figured, “it’s only an extra hour.” It was an hour well spent.

“We were just two boys straight off the farm and we looked at each other when we both got hired and said ‘what kind of job is this that hires guys like us,’” Hladik laughs.

Posted as an agricultural attaché in New Zealand and later West Germany, Hladik’s life soon became a whirlwind of trips to foreign countries. He was assigned to work in Germany, Bangkok, Hong Kong and Beijing, eventually becoming number two in the Chinese embassy.

Working in the trade of agricultural products, completing annual wheat surveys and reporting on the dairy industry, Hladik soon became the go-to guy for all things agriculture related. He was also the first to get food items like BC apples, Canadian poultry and maple syrup into countries like New Zealand.

Hladik doesn’t travel much anymore but that doesn’t mean he’s slowed down. He now focuses his attention on writing about the subject he knows best – agriculture. He has just published a book, Demystifying Food from Farm to Fork.

The book sheds light on numerous food related activities, practices and issues, giving insight into the complexity of the journey food takes to get from the farm to our forks.

“I’m writing to those who think they know about food but still have an open mind and to the urban person who is concerned about the food supply,” explains Hladik. “It’s to the somewhat informed laymen on food.”

Funnily enough, the book emerged
Chocolate anyone? NuFS grad and former Disney on Ice skater Kristyn Edge is now a consumer scientist at the venerable chocolate maker, Cadbury.

FOR THE LOVE OF A CHOCOLATE BAR

There are very few people who have translated their love of a chocolate bar into a full-time job but Kristyn Edge ’09 BSc (NuFS) has done it.

Her fondness for Cadbury Dairy Milk, combined with an impending move from Alberta to England, prompted her to seek out a job with the British candy-maker. She now works for Cadbury as a consumer scientist. “I organize, run, collect and analyze the data for chocolate, gum, and candy tastings. We work with all the Cadbury products and brands worldwide to ensure that they remain true to their outstanding reputation.”

Food Science was not initially in Kristyn’s career plan. She attended U of A for one year of general science, then put her studies on hold to perform with Disney on Ice. “After four years, my husband (then fiancé) and I decided that it was time to move into real life. I applied to the Nutrition and Food Science program. It was the right move for me.”

Kristyn says her interest in sensory science was inspired by the Principles of the Sensory Evaluation of Foods course she took in her fourth year.

“ALES gave me a great grounding in science and I want to continue to gain experience working in industry. There is a growing market for the use of sensory science. Many major companies pour hundreds of millions of dollars into sensory and consumer science to gain a further understanding of their consumers and ensure that their products make the mark.”

IN MEMORIAM

The Faculty of ALES notes with regret the passing in 2012 of its following alumni:

- Allan Wayne Anderson, ’62 BSc (Ag), ’66 MSc, of St. Albert, AB, in March
- Iris Vivian Bales (Amundsen), ’41 BSc (HEc), of Toronto, ON, in June
- Herbert Clemens Andersen, ’67 BSc (Ag), of Camrose, AB, in March
- Eiko Atsu (Iwashita), ’51 BSc (HEc), of Renton, WA, in May
- Roy Torgny Berg, ’50 BSc (Ag), of Sherwood Park, AB, in May
- Gordon Gunster Bruins, ’58 BSc (Ag), of Medicine Hat, AB, in February
- Ann Christina Castle, ’60 BSc (HEc), of Salmon Arm, BC, in March
- Nellie Irene Forrest (Coyle), ’41 BSc (HEc), of Port Coquitlam, BC, in February
- Beatrice Winnifred Fuller, ’36 BSc (HEc), of Edmonton, in January
- Gayle Colleen Hennig, ’84 BSc (HEc), of Japan, in April
- Alan Strathcona Hodgson, ’50 BSc (Ag), ’68 LLB, of Edmonton, AB, in April
- Joseph Hrdlicka, ’57 BSc (Ag), of Daysland, AB, in February
- Arthur Ross Jones, ’51 BSc (Ag), of Edmonton, AB, in October
- Lloyd Kenneth Peterson, ’51 BSc (Ag), of Edmonton, AB, in May
- Delbert Cooper Purnell, ’46 BSc (Ag), of Eckville, AB, in April
- Grace Mary Raworth (Sutherland), ’40 BSc (HEc), of West Vancouver, BC, in February
- George David J. Rife, ’61 BSc (Ag), of Smoky Lake, in January
- Margaret Ida Robblee (Tredger), ’39 BSc (HEc), of Edmonton, in January
- Eugene Humphrey Senetza, ’92 BSc (Ag), of Smoky Lake, AB, in May
- John Skory, ’46 BSc (Ag), of New London, CT, in June
- Irma Young (Rolf), ’47 BSc (HEc), of Edmonton, AB, in April

from disagreements he was having with his wife’s friends over their opinions of food.

“I started to write on genetically modified foods, organic, all the foods they championed and all the ones I championed and tried to cut a middle path on everything. I got up to about three or four subjects covered and my wife said ‘you know, you’ve got the basis of a book here,’” says Hladik.

The childhood memories that served him well over the years have also made their way into the book, mixing personal experiences with information and facts gathered over a lifetime of work in agriculture. In addition to adding credibility to the book, their inclusion means a lot to Hladik. After all, they’re the reason he’s here in the first place.”
It's now been a little more than a year since I graduated with my degree in Human Ecology, majoring in clothing and textiles. When I look back on where I've been, it's amazing how my view of the industry has changed.

I always knew I wanted to work on the business side of fashion. When I was in high school, I worked for a clothing boutique and I knew that was the environment I wanted to work in for the rest of my life. Now, I'm the business manager at Holt Renfrew, but getting to this spot certainly wasn't easy. Knowing what you want to do is a lot different than knowing how to get there.

I came to the University of Alberta to study in another faculty before I stumbled into Human Ecology. I had looked at programs relating to fashion in other cities but when I found Human Ecology, the courses were perfect – and that's when everything started falling into place.

While I was doing my degree, I started my own small business – a wardrobe consulting and personal shopping company called The Accomplished Closet. Then, after finishing my coursework, I did my practicum at gravitypope, a footwear store. That was a steep learning curve – having to take everything I had learned in the classroom and actually putting it into practice. But I enjoyed it and learned so much that I was hired on as a head office receiver after my practicum ended and was promoted to brand manager within a year.

When I started at Holt Renfrew in April 2012, my first thoughts were “This is the real thing – I can't screw up!” It was the biggest company I’d ever worked for and I knew this was my chance to prove myself but I had a big job ahead of me.

My job was a newly created position, and a management position no less. I oversee the sales for accessories, women’s and men’s wear, and act as a link between the store and the buyers. I look at how all our brands are performing and try to boost the ones that aren’t doing well. It was largely up to me to figure out how to accomplish that, as it had never been done before. As with any new position, especially a management position being filled by such a young person, there was some resistance. But I persisted. I built relationships and tried to show the value that I could bring. In time, it paid off.

Looking back, my perfectionist streak was a blessing and a curse. It’s what kept me going but it also added to the stress I felt as I was trying to prove myself.

It turns out this career is the perfect combination of my interests. I deal with sales and the business side of fashion. But I also love that I get to physically work with the products and be in the store and on the floor. Numbers don’t necessarily tell the whole story, so I am the eyes and ears of our buyers to tell them what’s really affecting sales in the Edmonton market.

My view of the fashion industry has expanded. It’s not just about how fashion can work for one person, like it was when I ran The Accomplished Closet. I’ve had to broaden my perspective and think about how an entire brand or department can work for an entire city.

I couldn’t be happier with where I’ve ended up. I always followed the advice that you do what you love and the rest will follow. It certainly worked for me. My love for fashion has transformed into a challenging and stimulating career. I’ve gotten everything I’ve always wanted. I know I want to continue working my way up in the industry and I’ll be ready for my next challenge.
What will your legacy be?

Your planned gift to the Faculty of Agricultural, Life & Environmental Sciences will help a student realize their potential or a researcher make a vital breakthrough. You will build on our long tradition of post-secondary excellence.

Remember the University of Alberta’s Faculty of Agricultural, Life & Environmental Sciences in your will. Make a commitment to the future without a change in your lifestyle today.

To create a legacy gift that keeps on giving, please contact either:
Ken Crocker | 780-492-1896 | ken.crocker@ualberta.ca, or Katherine Irwin | 780-492-2118 | katherine.irwin@ualberta.ca
Join us and stay in touch with what’s going on at the faculty and with your classmates.

www.facebook.com/UofAAles

www.ales.ualberta.ca