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CHAIR’S MESSAGE

This report, the second such one prepared, continues to be a cornerstone piece in the communication and outreach efforts of the department to our stakeholders beyond the faculty and our students. The department continues to prosper and perform well in terms of contributions to the application of economic and sociological theory and methods to many resource and environmental issues. Have a look through the document to see for yourself.

First, I am happy to report the addition of three new faculty members to the department. Drs Maik Kecinski, Xiaoli Fan and Mohammad Torshizi bring new skills and interests in terms of experimental economics, operations research, agribusiness and innovation. I think you will see these skills being applied to pest and water management issues in forestry and agriculture as well as various crops and transportation problems. Torshizi, in particular, has brought excitement and enthusiasm to the undergraduate agribusiness-teaching portfolio. This included a major overhaul of the related capstone course that is now centred on the production of business plans for actual agribusiness enterprises in the province.

Department research output continues to be strong, with a total of $4,502,194 in external funding from a variety of sources. These resources have funded about 30 graduate students over the last two years and have supported the publication of more than 66 journal articles. This maintained output has placed REES among the top 20 related academic units in the world and the top spot among similar departments in Canada. In addition, REES continues to have a strong MSc program, with a number of our students winning international and national awards for their research performance. Some of them have gone on to do innovative things such as Ryan Mason and Cathryn Sprague’s Reclaiam Urban Farm, which reclaims vacant urban land and uses the space to grow vegetables to supply the local food system. These former students were awarded an Alumni Innovation Award in 2016.

The Three Minute Thesis proposal competition continues every September and provides presentation experiences for our second-year cohort of MSc students and gets them thinking formally about their thesis research. The Hawkins Research Award continues to support this event by funding prizes for the top two presenters. These awards, as well as scholarships graciously endowed by many alumni, are presented at the annual awards event following the competition.

The course set in 2016 to formally engage with our graduate student alumni was rolled out in 2017. This involved formal contact by me as well as fundraising activities by the Faculty of ALES and the university’s Advancement units, as well as with assistance by alum Dale Kaliel. I must say that so far these efforts have not garnered significant contributions to the REES scholarship portfolio. However, I am pleased to report the development of two new graduate scholarships in the department with donations from professors emeriti and former students. If any of you reading this report wish to become involved in supporting department and student activities, I invite you to contact me to see how you could assist future students.

One relatively new initiative I am happy to report is increased activity in the department seminar series. This includes formal department seminars as well as more informal brown bag seminars. Funding for hosting visiting speakers comes from the 50th Anniversary Endowment. REES would welcome additional contributions to this 50th anniversary fund from alumni and others. One of my goals is to garner sufficient ongoing financial support to fund a REES annual lecture. Currently, REES is the only department in the faculty to not have such an event. As with my plea above, I invite you to contact me if you are interested in providing support for seminars or lectures. Also, if you would like to be invited to the REES seminars, please contact me and I will ensure you are placed on the department’s email contact list.

Dr. Peter Boxall
Chair
Research Funding

TOTAL VALUE OF RESEARCH FUNDING 2015-18
(financial fiscal year)

- Alberta provincial government: $1,188,673
- Federal government: $1,223,678
- Other government: $668,022
- Industry: $175,532
- Other: $1,246,289

4,502,194
100
SCHOLARSHIPS & AWARDS
(Staff and student awards blended)

12
INTERNATIONAL ACADEMIC VISITORS

54
CURRENT GRADUATE STUDENTS
(As of March 2018)

GRADUATE STUDENTS FROM ACROSS THE GLOBE

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(As of July 2017)

GRADUATE STUDENT ENROLMENT

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<td>Visiting Students</td>
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(As of July 2017)

PRESENTATIONS

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<td>Australia</td>
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</tr>
</tbody>
</table>

(2016-2017 Academic Year)
The years 2016 and 2017 were a successful period, with new faces and exciting changes to the department. The department was pleased to welcome a number of academic staff joining the research and teaching team to forge responsible solutions. In August 2016, Dr. Mohammad Torshizi joined our teaching force as an assistant professor. Dr. Maik Kecinski joined shortly after, bringing his research interests in environmental risk, experimental economics of contamination, northern and Indigenous issues and land conservation. In August 2017, the department welcomed Dr. Xiaoli Fan, whose expertise lies in agricultural and food business management.

Aside from the addition of several staff members, there has also been a refreshment to our department spaces. To enhance learning and studying experiences for our graduate and undergraduate students, the department made extra efforts in restoring studying and working spaces. Throughout 2016 and 2017, we renovated and refurbished the department offices, conference rooms and several graduate student offices. The Eric Berg Reading Room was also renovated to create a more welcoming study space for students, with plenty of desk space and comfortable couches and chairs. The refreshed spaces have seen a dramatic increase in student use since their reopening in early 2018. The old graduate student computer lab has been relocated to the adjacent new Eric Berg Graduate Computing Laboratory and is now equipped with new computers in a classroom setting for a better study and learning experience for our graduate students. A generous donation allowed renovations of our graduate student and staff kitchen and lounge. When you first walk into the room, you can see the beautiful artwork by our professor, Brenda Parlee, on the feature wall.

Since the start of 2017, the department’s website has been updated to align with the faculty and university’s digital strategy. With a refreshed design and updated public-facing content, we have raised our online presence. The website is also designed to be responsive to mobile devices. Visitors to our website will experience a more visually appealing and user-friendly interface on desktop and mobile devices.

In the summer of 2017, the department hosted a group of undergraduate students from several universities in China as part of the ALES summer program. The program included in-class teaching, an experimental lab and hands-on field trips to showcase Canadian Natural Resource Management to the international visitors. The program also provided an opportunity for our instructors to find new ways to keep a class of international students engaged.

The department hosted 28 brown bags and seminars and nine international visitors in 2016 and 2017. We received 12 faculty awards and 44 student awards for prestigious international teaching, research and graduate student success. We are proud to note that Dr. Henry An acquired tenure and was promoted to associate professor in October 2016.

As small a department as we are, we will continue to strive for building responsible solutions throughout the years, slowly but surely, for our community, stakeholders and the environment.

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FACULTY AWARDS

2016

An, Henry  Meritorious Teaching Award
National Association of Colleges and Teachers of Agriculture (NACTA)
Anders, Sven  International Mobility Award
World University Network and University of Alberta
Luckert, Martin  Teaching Wall of Fame
Faculty of Agricultural, Life & Environmental Sciences
Mohapatra, Sandeep  Teaching Wall of Fame
Faculty of Agricultural, Life & Environmental Sciences
Parkins, John  Teaching Wall of Fame
Faculty of Agricultural, Life & Environmental Sciences

2017

Adamowicz, Vic  Outstanding Alumni Award
Department of Applied Economics, University of Minnesota
Fan, Xiaoli  George F. Warren Award
Dyson School of Applied Economics and Management, Cornell University
Swallow, Brent  International Engagement Award
Faculty of Agricultural, Life & Environmental Sciences
Mentor of the Year
School of Business, Business Cooperative Education
Goddard, Ellen  Distinguished Fellow
Australasian Agricultural and Resource Economics Society
Teaching Wall of Fame
Faculty of Agricultural, Life & Environmental Sciences
Luckert, Marty  Teaching Wall of Fame
Faculty of Agricultural, Life & Environmental Sciences

5 Professor Ellen Gooddard presented at the ICABR Conference in June 2016.

6 Professor Brent Swallow received the International Engagement Award from Dean Stan Blade at the ALES Faculty Awards Ceremony, December 2017.
**Academic Staff**

**Dr. Vic L. Adamowicz**
Distinguished university professor; vice dean (Faculty of ALES); environmental economics, econometrics, forest economics; director, Alberta Land Institute

**Dr. Henry An**
Associate professor, economics of technical change, development economics, econometrics

**Dr. Sven Anders**
Professor; value-added meat marketing; member of the ARVI Council

**Dr. Ellen Biewlawski**
Professor; Arctic archaeology; Indigenous studies; negotiations between Indigenous groups and Canadian governments (joint with the Faculty of Native Studies)

**Dr. Peter Boxall**
Professor; department chair; resource and environmental economics

**Dr. Debra Davidson**
Professor; natural resource politics and governance, environmental risk, state theory, rural sociology

**Dr. Xiaoli Fan**
Assistant professor; food and agribusiness management, consumer demand, bioeconomic models of invasive pests and diseases, mathematical programming

**Dr. Ellen Goddard**
Professor, co-operative chair; agricultural marketing and business program leader, Consumer and Market Demand Policy Research Network, Agriculture and Agri-Food Canada, leader of the Consumer and Market Demand Agricultural Policy Research Network

**Dr. Lars Hallstrom**
Professor; director of the Alberta Centre for Sustainable Rural Communities; public health and politics of environmental movements

**Dr. Scott Jeffrey**
Professor; associate dean (Academic); production economics, agricultural business management

**Dr. Maik Kecinski**
Assistant professor; environmental risk and climate change, water issues, land conservation, experimental and behavioral economics

**Dr. Naomi Krogman**
Professor; associate dean (Faculty of Research and Graduate Studies); sociology of natural resources, international development, gender
Dr. Martin Luckert
Professor; forest economics, natural resource economics

Dr. Philippe Marcoul
Associate professor; financial economics, industrial organization, contract theory

Dr. Sandeep Mohapatra
Associate professor; international development, applied econometrics, agricultural and trade policy

Dr. John Parkins
Professor; graduate co-ordinator; rural sociology, environmental sociology

Dr. Brenda Parlee
Associate professor; Canada Research Chair; social responses to ecological change

Dr. Feng Qiu
Associate professor; agricultural policy, price and market analysis, agricultural production and supply, risk and insurance modelling

Dr. James Rude
Associate professor; graduate co-ordinator; trade policy, agricultural marketing, price analysis

Dr. Brent Swallow
Professor; climate change, economic development, environmental economics, property rights

Dr. Mohammad Torshizi
Assistant professor; economics of research and development and innovation policy, food and agricultural policy, grain transportation and handling, agribusiness venture management

Dr. Bruno Wichmann
Associate professor; environmental and resource economics, industrial organization, social and economic networks, experimental economics

Adjunct professors
Sean Cash
Shari Clare
Grant Hauer
Tomas Nilsson

Elwin Smith
Bodo Steiner
Bill White
Marian Weber

Postdoctoral fellows
Jay Anderson
Violet Muringai
John Pattison-Williams

Research associates
Kevin Jones
Evan Miller-Tait

Curtis Rollins
Hawley Campbell
RURAL AND ENVIRONMENTAL SOCIOLOGY
Social practices of animal husbandry in the Alberta cattle industry

The domestication of animals holds a crucial role in the development of societies worldwide. The production-based handling practices of livestock agriculture are a main area of inquiry for those who seek to improve animal husbandry and the treatment of animals implicated in agriculture. This qualitative study explores production-based social practices among cow-calf producers and dairy producers in Alberta, Canada. More specifically, I explore how producers perceive of themselves as mitigating animal welfare issues that permeate the beef and dairy industries through their animal husbandry decisions. I engage with frameworks from social practice theory to explore what facilitates the social reproduction and the social transformation of branding, disbudding and dehorning, weaning, and the on-farm low-stress handling and moving of cattle. Supervisor: J. Parkins
Barren ground caribou in northern Canada are a well-studied species that are highly valued and harvested by First Nations and Inuit peoples. Their herds tend to dramatically cycle in size every 40 to 70 years, and harvest data and related research show that Indigenous people adapt to those cycles.

“There is little to no evidence that harvesting has had any negative effects on wildlife population dynamics in Canada,” said Brenda Parlee, lead researcher on a study that sought to unearth the facts around an issue she sees as poorly understood by governments and the public.

A paper published in the peer-reviewed journal, *Science Advances*, has attracted lots of media attention. As one of the authors, associate professor Brenda Parlee was interviewed by multiple media outlets to talk about her findings in this paper: the decline of caribou population in Canada is not caused by over-harvesting by Indigenous groups.

Based on figures from 1985 to 2000, Parlee’s research found that when the caribou population was more abundant, harvest levels are higher, and when there were fewer caribou, there were fewer animals harvested and other resources were used.

**Caribou herds in Northwest Territories (NWT) and Yukon**
Parlee’s team analyzed 13 years of harvest data collected by governments in the Northwest Territories that showed strong parallels in caribou population and harvest numbers (as caribou populations dropped, communities harvested fewer caribou). As well, the research synthesized 30 years of human health studies, which show similar steep declines in traditional food consumption across Canada, including in the north. All evidence points to Indigenous people being good stewards of resources integral to their food security and economies, said Parlee.

“Most communities in the north are respectfully participating in harvest management planning with the aim of doing their part to protect caribou,” said Parlee. “But time, attention and resources could be better spent.”

Traditional knowledge and scientific research indicate there are a variety of other factors that drive changes in populations of barren ground caribou.

“There is a lot of evidence that human disturbance of habitat from mining and oil and gas activity is a critical problem,” said Parlee.

“Indigenous communities living in the Bathurst caribou range will be the first to tell you the Bathurst caribou herd has undergone a dramatic population crash that coincides with a dramatic increase in mining development.”

Parlee suggests current government policies that restrict harvesting but allow for increasing mining, oil and gas activity are putting both caribou and northern communities at risk.

“It’s a problem that compounds,” she said. “Mining exploration and development is increasing stress on caribou and restricting subsistence harvesting of caribou creates problems of food insecurity.

The problem is not just limited to northern Canada, she said. “Wildlife conservation decisions need to be based on evidence, not anecdote. It is counter-productive to ignore valuable knowledge from Indigenous people who have sustainably managed their natural resources for thousands of years.”

The study Undermining Subsistence: Barren-Ground Caribou in a ‘Tragedy of Open Access’ is published in the journal Science Advances.

Dr. Brenda Parlee also co-edited the book When the Caribou Do Not Come: Indigenous Knowledge and Adaptive Management in the Western Arctic, published by UBC Press, which ultimately drives home the important role that Indigenous knowledge must play in understanding, and coping with, our changing Arctic ecosystems and in building resilient, adaptive communities.

PRINCIPAL INVESTIGATOR
Brenda Parlee

CO-INVESTIGATOR
John Sandlos
David C. Natcher
ENVIRONMENTAL AND RESOURCE ECONOMICS
Women’s land rights are increasingly advocated as an empowerment tool to spur development outcomes. However, empirical evidence of this relationship is limited. In this study, we use data from peasant communities in rural Peru to explore the effect of the intra-household allocation of inherited land on women’s empowerment. Empowerment is modelled as a latent variable measured by different influence indicators using a generalized structural equation approach. We draw on item response theory (IRT) to estimate difficulty and discrimination parameters which can inform policymakers about the impact of empowerment policies on women’s types of influences within their households. The empirical approach is consistent with empowerment’s latent and multidimensional nature and pays attention to endogeneity issues often present in other empirical studies. We find that although women’s land rights increase empowerment, the intra-household allocation of land determines the magnitude of this impact.

Supervisors: S. Mohapatra/B. Swallow
When asked about why he chose the Department of Resource Economics and Environmental Sociology (REES) in the Faculty of ALES, one of Dr. Maik Kecinski’s responses is that REES gives him an incredible amount of freedom to work on issues and questions he is interested in and wants to explore. Looking at Kecinski’s ongoing and previous research topics, it’s easy to see why he would like that kind of freedom. His research methodology typically involves experimental and behavioural approaches, such as perceptions of “green” foods to behaviour in climate change games, the establishment and stability of social networks, public goods and common pool resources in northern Indigenous communities.

Before he took his position as assistant professor in REES, Kecinski was working in the Centre for Experimental & Applied Economics with Dr. Kent Messer at the University of Delaware. Their team has done research on oysters that has attracted some public attention, including that of U.S. governors and senators. They looked at attributes that will affect oyster consumers’ purchasing choices. The study was done with real monetary incentives and oysters for participants to take home to understand several attributes that will affect consumer willingness to pay. Questions such as “Does brand name affect willingness to pay?” “Does the word ‘local’ specifically changes willingness to pay?” and “Does knowledge about environmental benefits of oysters increase willingness to pay?”

Currently, Kecinski is working on a series of field experiments on water contamination. One is on environmental justice, as recent discoveries of contaminated drinking water in Michigan have raised important environmental justice questions. This research uses non-hypothetical economic experiments to study participants’ willingness to accept monetary compensation in exchange for being subjected to water from locations that have previously been reported as containing different levels of arsenic and lead. Results suggest that people who live below the poverty line are significantly more likely to voluntarily expose themselves to such contaminants compared to other income groups. These results raise important ethical questions about the correct policy response to protect vulnerable communities.

Looking forward, Kecinski wants to continue to build his research program on climate change and risk, particularly focusing on northern Indigenous issues. Mostly, he says, he is interested in having his research positively contribute to society, the environment and science, and to continue his efforts to collaborate within REES and abroad, and more importantly building strong professional relationships and friendships.

Disadvantaged communities are more susceptible to lead and arsenic contamination
Update: Alberta’s Living Laboratory wetlands project

Rocky View County sits on the Nose Creek Watershed, an important water basin that passes through agricultural land, urban areas and places of industrial development. This land area has over 400 restorable wetland basins available, including 250 landowners with restorable wetlands on their property.

Wetlands play a critical role in sustaining healthy watersheds by protecting water quality, providing water storage and infiltration, preventing floods, providing habitat for wildlife, fish and plants, and sustaining biodiversity. They are Earth’s most productive ecosystems. According to the Alberta government’s wetlands policy, wetlands are estimated to host some 400 species of plants, some of which are listed as rare, threatened or endangered in the province.

The Alberta’s Living Laboratory wetlands project is a multi-year, interdisciplinary research project examining the science and economics of wetland restoration in Alberta. This is a timely subject because a new wetland policy has come into force in the province, changing the replacement requirements for wetlands lost to development.

The goals of this project were simple: discover the number of restorable and lost wetlands in Rocky View County and assess the value of restoring wetlands to all those living within the county. The work and lessons learned in nearly three years have been considerable.

To identify previously lost, restorable wetlands, the researchers used a technique called remote sensing, a process that identifies low-lying areas where wetlands tend to be. Restoring wetlands comes at a cost for landowners. It’s why the research team used an innovative reverse auction process that was developed at the University of Alberta and provides an economic incentive for landowners to get involved in recovering wetlands.

Landholders were asked to name the amount they would require to restore the wetlands on their property. The researchers ranked those amounts as “bids” in an auction. Participants were paid equally the amount of the highest winning bidder’s submission. In total, 13 basins covering 47.3 acres were accepted for restoration. Ten of these basins have now been restored – indicating the success of the process. The fact is, while wetlands cover 20 percent of Alberta’s surface area, there has been steady erosion due to growing demands from industry and population growth. But conserving and restoring wetlands across the province does not need to come at the cost of economic development.

The engagement and support from landowners in Rocky View County in just a few years has been encouraging.

What has been learned from this research to date will be critical when it comes to maintaining engagement with landowners across Alberta and developing public policy solutions that work and can be effective for the benefit of all Albertans.

**PROJECT WEBSITE**
restoreourwetlands.ca

**PRINCIPAL INVESTIGATORS**
Dr. Peter Boxall
Dr. Irena Creed (Western University)

**CO-INVESTIGATOR**
Dr. Shari Clare

**PROJECT STAFF**
Project Managers: Stacey O’Malley, Hawley Campbell, Anna Kauffman
David Aldred, Technician (Western University)
Jacqueline Serran, Technician (Western University)
ECONOMICS of
AGRICULTURE, FOOD AND AGRIBUSINESS
Estimating the Economic Value of Drinking Water Reliability in Alberta

There are growing concerns that the increased severity and frequency of summer droughts and forest fires in regions like Alberta will lead to drinking water reliability challenges for communities. The objective of this study was to provide an estimate of the monetary value of drinking water reliability in Alberta. The study employed the results of an Alberta-wide survey on drinking water reliability. The survey elicited respondents’ experiences with, and risk perceptions of, three types of water outages. Respondents who expressed positive risk perceptions were presented with alternative programs that reduce their risk perceptions to specified percentages but increased their water bills. Using cost and other program attributes as explanatory variables we measured the probability of supporting the programs. We find that Alberta households are willing to pay additional amounts of money on their water bills to support programs that will increase the reliability of their sources of drinking water. **Supervisor: W. Adamowicz**
Xiaoli Fan joined the Department of Resource Economics and Environmental Sociology (REES) in August 2017. She received her PhD in applied economics and management from Cornell University.

Fan’s research interests include food and agribusiness management, bioeconomic modelling of pest and diseases, and consumer demand analysis.

A significant part of her research involves developing and applying mathematical models, particularly optimization models, to inform agricultural stakeholders’ decisions concerning food production, distribution, and marketing problems.

During her PhD studies, Fan worked on a USDA-funded project that studied how to optimally monitor and control an invasive species: spotted wing drosophila (SWD). Fan and co-authors developed a dynamic bioeconomic model to evaluate the performance of alternative SWD management strategies.

Results from the project provided valuable help for fruit growers to choose the most economically and environmentally sustainable SWD management strategies that reduce reliance on insecticide applications.

Fan’s work on SWD control has led to her general research interests in the bioeconomic modelling of pest and disease management. Her current work in this field includes: modelling the economic impact of the trade regulation of apple maggot, a bioeconomic model of mountain pine beetle control in Alberta, and optimal control of banana xanthomonas wilt disease in Uganda.

Fan is also conducting research related to agribusiness and food systems management. For example, she co-authored a paper published in the American Journal of Agricultural Economics that sheds light on how food banks can optimize their fresh produce gleaning operations to simultaneously reduce food waste and improve the nutritional quality of food available to food assistance recipients.

An extension of this work to a multi-crop setting was published in the journal Food Policy. In addition, she is also studying how different types of information affect consumer acceptance of genetically modified potatoes in Canada.

The applied nature of the department, the abundant collaboration opportunities with researchers in the department and across campus, and Alberta’s strong and competitive agriculture sector make REES the best place for Fan to conduct her research.

Although she has only been with the department for less than a year, Fan is already leading two research projects, and her goal is to continue working with the university’s talented researchers and students to improve stakeholders’ decision-making and advance agriculture development in Alberta.
Economic evaluation of farmland conversion and fragmentation in Alberta

Follow-up on the three-year research project focuses on the economics of fragmentation and conversion of agricultural land to non-agricultural uses in Alberta.

A new report from the Alberta Land Institute, conducted by Dr. Brent Swallow, Dr. Scott Jeffrey, Dr. Feng Qiu and graduate students, found that high-quality agricultural land in Alberta continues to be fragmented and lost and calls for greater discussion around land-use policies to preserve the quality agricultural land as Alberta grows. It found that most of the farmland converted for developed uses between 2000 and 2012 was of the highest levels of suitability, with 35 per cent of the highest suitability and 34 per cent of the second highest suitability found in Alberta.

“This conversion and fragmentation of agricultural land have led to concerns about rural landscape preservation, loss of food production capacity, high service costs, and conflicts between farmers and new rural residents,” Swallow said. “Given the current legislative tools available to public officials under the Alberta Land Stewardship Act and the Modernized Municipal Government Act, it is important that all officials responsible for decisions about land use understand the magnitude and causes of the problem.”

A survey conducted for the report shows that attitudes among residents in the Edmonton metropolitan region revealed concern about the rapid expansion of urban areas and the consequential loss of natural and agricultural land in the area. About 80 per cent of the respondents indicated they were willing to make a $20 one-time contribution toward farmland conservation in the Alberta capital region.

“Alberta’s landscape is undergoing substantial changes due to growth in its economy and population,” Swallow said. “The agricultural industry, which uses approximately one-third of the provincial area, is significantly affected by these changes. Albertans are interested in discussing the best methods to develop and grow, while also conserving important land areas for farming.”

While there has been an overall decrease in the high-quality farming soil in Alberta due to urban expansion, there has been a small increase in overall farmland due to the conversion of grasslands and forests into croplands and pasture.

Municipal councils are at the front line of decision-making regarding farmland preservation in Alberta.

Both the Alberta Land Stewardship Act and the Modernized Municipal Government Act make municipalities responsible for developing land-use plans and designating allowable land uses.

While individual landowners and developers look for development opportunities, municipal councils need to consider the broad public interest, including the food production and environmental service values of farmlands.

Swallow and other researchers at the Alberta Land Institute are now investigating attitudes toward farmland conservation, development in other parts of Alberta and the effects of pro-development policies on real estate prices.

Adapted from the Alberta Land Institute website

Alberta is losing the values of prime farmland

**PRINCIPAL INVESTIGATORS**

Dr. Scott Jeffrey

Dr. Brent Swallow

**WEBSITE**

albertalandinstitute.ca
The department has mentored some exceptional students throughout the past two years. Cathryn Sprague and Ryan Mason, two MSc graduates with specialization in rural sociology, were recognized by the University of Alberta with the Alumni Innovation Award in 2016. During their graduate programs, they decided to reclaim vacant city land and use the space for growing food in an effort to improve the local food system. Their shared passion for gardening and food security led to Reclaimed Urban Farm being born in 2014. The Reclaimed Urban Farm uses low-impact and organic practices to grow a variety of urban-friendly seasonal produce on plots of land borrowed from local landowners. The fresh produce is then provided to local restaurants and at farmers’ markets.

MSc student María Montenegro demonstrated academic excellence in her graduate program under the supervision of Drs. Brent Swallow and Sandeep Mohapatra by winning both the Canadian Agricultural Economics Society’s and American Agricultural and Applied Economics Association’s Outstanding Masters’ Thesis Awards in 2017. To conduct the research and collect data for her thesis, Montenegro had to build strong connections and relationships with subjects from six Indigenous communities, government authorities and an international research organization. Currently, she is working as a research analyst measuring settlement, education, and employment outcomes of newcomers to Canada who participated in the educational program that teaches English and settlement at NorQuest College.

REES students were exceptionally successful at the annual Canadian Agri-Food Policy Conference by winning the research poster competition for three consecutive years. Hawley Campbell placed first in 2016 with her poster, “Gains from Trade but to Whom? Canola and the Trans-Pacific Partnership.” Emilie Bassi placed third in 2017 with her poster “The Producers’ Perspective: Constraints to Farm Animal Welfare Policy Implementation in Alberta.” Anna Kauffman placed first in the 2018 competition with “Reverse Auctions for Restored Wetlands: Low Participation on the Prairies.”

Under the co-supervision of professor Sven Anders and Matty Demont of the International Rice Research Institute in Los Baños, Philippines, undergraduate student Emilie Zentner placed first in both the research poster competition and the policy brief competition at the Canadian Agri-Food Policy Conference in 2017 with her poster “Does the River Flow Upstream? A Meta-Analysis of Benefit Distributions of Biotechnology Crops.” Later in the year, Zentner, along with her teammates Ahmed Hussein and Ashley Saurer and the help of their coach Dr. Mohammad Torshizi, won the Canadian Agricultural Economics Society’s David Sparling Business Case Competition. Then they outcompeted four other undergraduate teams from across the country in providing recommendations to Bonduelle, a large vegetable processor in Quebec, to further the development of their sustainability-angled competitive advantage in the vegetable processing industry.

PhD student Violet Muringai was awarded the 2016 Richardson-Applebaum Scholarship Award for Outstanding PhD Dissertation by the Food Distribution Research Society (FDRS) in the United States for her thesis “Trust, Perceptions, Intentions and Behaviour in Meat Consumption.” Currently, she is working as a post-doctoral fellow...
with Dr. Ellen Goddard, her supervisor during her PhD program.

Aside from students’ success in academia, our graduate student association, REESSA, has organized several successful academic and social events during the past two years. From laser tag social night to heritage night at community halls, the cohorts were able to get together and have some fun throughout the busy days of study and research work. In March 2017, both professors and students went to the Saville Community Sports Centre to participate in the curling bonspiel. With the reopening of our kitchen and lounge the following month, the entire department, students and staff, were joined by REESSA to have the chili cook-off and some fun social time. After the initial collaboration in 2015, REESSA continued to host their joint Visions conference with the Alberta Agricultural Economics Association (AAEA) in Red Deer in 2016 and 2017, with a broad spectrum of presentations and a variety of speakers from industries, government and academia.

2017 Kingman crop tour

2017 chili cook-off

2017 curling bonspiel
STUDENT AWARDS 2016

Afanasyeva, Aleksandra QE II Graduate Scholarship (master’s)
Andrews, Jeffrey QE II Graduate Scholarship (doctoral level)
Arenna Three Minute Thesis competition (M. M. Hawkins Graduate Research Award)
Awatta, Sara Roger S. Smith Award
Baydack, Micki QE II Graduate Scholarship (master’s)
Bassi, Emilie James Copeland Graduate Scholarship
Joseph-Armand Bombardier CGS Master’s Scholarship – SSHRC Walter H. Johns Graduate Fellowship
Bennet, Arlana FGSR Indigenous Graduate Award
Bergstrom, Apryl Travis W. Manning Book Prize
Bruno, Grant FGSR Indigenous Graduate Award
Campbell, Hawley Canadian Agri-Food Policy Conference poster competition first place
Cyr, Kaitlyn Best master’s student paper at the International Symposium on Society and Resource Management (ISSRM)

Doll, Claire Brett G. Cortus Memorial Graduate Scholarship
Travis W. Manning Book Prize
Durocher, Geoffrey B.J. McBain Graduate Scholarship
John Proskie Memorial Scholarship
Le, Stephanie James Unterschultz Memorial Graduate Scholarship
Travis W. Manning Book Prize
Luna, Alexandra Frias QE II Graduate Scholarship (master’s)
Martin, Chelsea FGSR Indigenous Graduate Award
James Copeland Graduate Scholarship
QE II Graduate Scholarship (master’s)
Muringai, Violet Richardson-Applebaum Scholarship Award for Outstanding PhD Dissertation
Novak, Lucas Western Agricultural Economics Association’s graduate student paper competition third place
Sarauer, Ashley Canadian Agricultural Economics Society Undergraduate Book Prize
Shandal, Monica Roger S. Smith Award
QE II Graduate Scholarship (master’s)
Schmidt, Alix B.J. McBain Graduate Scholarship
John Proskie Memorial Scholarship
Wray, Kristine FGSR Indigenous Graduate Award
QE II Graduate Scholarship (doctoral level)
Yang, Meng Brett G. Cortus Memorial Graduate Scholarship
Zheng, Yanan Alberta Agricultural Economics Association Master’s Scholarship
Three Minute Thesis competition (M. M. Hawkins Graduate Research Award)
Livestock Gentec student poster competition third place

(Left) Dr. Nicoleta Uzea, Ahmed Hussein, Emilie Zentner, Ashley Sarauer, Dr. Bandon Schaufele, and Dr. Mohammad Torshizi at the 2017 CAES Awards Banquet
<table>
<thead>
<tr>
<th>Name</th>
<th>Awards/Competitions</th>
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<tbody>
<tr>
<td>Bassi, Emilie</td>
<td>AAFC research poster competition third place</td>
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<td>FGSR Graduate Student Travel Award</td>
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<td>Canadian Agricultural Economics Society</td>
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<td>Visions Conference best graduate student presentation second place</td>
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<td>Baydack, Micki</td>
<td>Environmental Sociology Graduate Scholarship</td>
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<td>Northern Scientific Training Program (NSTP) Grant and Northern Research Awards (UANRA) Grant 2017</td>
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<td>Travis W. Manning Book Prize</td>
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<td>Bruno, Grant</td>
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<td>Brown, Bijon</td>
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<td>Cao, Yangzhe</td>
<td>Government of Alberta Graduate Studies Scholarship</td>
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<td>James Unterschultz Memorial Graduate Scholarship</td>
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<td>Fisher, Anthony</td>
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<td>Godfrey, Todd</td>
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<td></td>
<td>Visions Conference best graduate student presentation first place</td>
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<td>Undergraduate Book Prize</td>
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<td>Hussein, Ahmed</td>
<td>David Sparling Business Case Competition</td>
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<td>Kauffman, Anna</td>
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<td>Three Minute Thesis competition (M. M. Hawkins Graduate Research Award)</td>
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<td>Montenegro, Maria</td>
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<td>Outstanding Master’s Thesis Award</td>
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<td>Onyango, Irene</td>
<td>FGSR Doctoral Recruitment Scholarship</td>
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<td>Sarauer, Ashley</td>
<td>B. J. McBain Graduate Scholarship</td>
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<td>David Sparling Business Case Competition</td>
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<td>John Proskie Memorial Scholarship</td>
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<td>Schmidt, Alix</td>
<td>Alberta Agricultural Economics Association</td>
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<td>Master’s Scholarship</td>
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<td>Joseph-Armand Bombardier, Canada Graduate Scholarship (Master’s)</td>
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<td>Walter H Johns Graduate Fellowship</td>
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<td>Centre for Behavioral and Experimental Agri-Environmental Research (USDA &amp; ERS) Travel Award</td>
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<td>Shandal, Monica</td>
<td>John Proskie Memorial Scholarship</td>
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<td>Wang, Shuo</td>
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<td>Al Brennan Memorial Graduate Scholarship in Forestry</td>
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<td>Livestock Gentec graduate student poster competition</td>
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<td>Wang, Yichuang</td>
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<td>FGSR Indigenous Graduate Award</td>
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<td>Yang, Meng</td>
<td>Agricultural &amp; Applied Economics Association</td>
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<td>Annual Meeting graduate paper competition third place</td>
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<td>Zentner, Emilie</td>
<td>AAFC policy brief competition first place</td>
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<td></td>
<td>AAFC research poster competition first place</td>
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<td>David Sparling Business Case Competition</td>
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The visions 2017 Conference was held in Red Deer, Alberta on April 27. It was the third collaboration between the Alberta Agricultural Economics Association (AAEA) and the Resource Economics and Environmental Sociology Graduate Students Association (REESSA). Expert speakers from the government, industry and academia attended the session and gave a wide range of presentations addressing current issues affecting Alberta and Canada’s agricultural sector, including disruption from emerging new technologies, changes in trade, agricultural consumptions, and GMO product marketing.

Two graduate students from the Department of Resource Economics and Environmental Sociology stood out from the 16 students who participated in the competition, winning the first and second prize of the best graduate student presentation awards sponsored by Canadian Agricultural Economics Society (CAES) at the Conference.

Todd Godfrey won first prize with his presentation, “Mining and alcohol consumption: New evidence from northern Canada.” His presentation showed how the distance between mines and where individuals live in northern Canada is related to the number of alcoholic drinks individuals consume, with the number of additional drinks decreasing as mines get farther away. Godfrey has worked on this project with his thesis committee members, Drs. Bruno Wichmann and Brenda Parlee, and the project is funded by Resources and Sustainable Development in the Arctic (ReSDA). Confidential Statistics Canada microdata have been accessed through the university’s Research Data Centre for regression analysis. The distances between individuals and mines in northern Canada were calculated using GPS co-ordinates from Statistics Canada’s Postal Code Conversion File and ReSDA’s online atlas. In addition to the number of mines within a specified distance from where the individuals live, socioeconomic respondent level control variables, and Forward Sortation Area control variables and fixed effects were used in the model.

Emilie Bassi gave the presentation, “Exploring the role of emotions in negotiating animal welfare practices and industrial production in Alberta’s cattle industry.” Under the supervision of professor John Parkins, Bassi conducted 30 in-depth interviews with beef and dairy producers in Alberta to explore their perceptions and practices of farm animal welfare. In her presentation, Bassi shared excerpts from these interviews to outline how producer emotions are reflected in narratives of reflexivity, agency and within the transformation of their farm animal welfare practices.

The winners were selected based on content, engagement and communication performance graded by five judges for each session. The two winners scored the highest, nearly full marks for their presentation performance.

This year, a post-conference farm and agri-foods tour of a bison and elk retail store and a dairy farm were offered to participants for the first time. Student participants had a chance to talk to one of Canada’s largest bison producers and learn about the entire farm-to-shelf process of a dairy product.
Amsalu, Dareskedar W., 2017, “Expanding irrigated agriculture in Alberta: an economic impact assessment,” MSc, agricultural and resource economics

Andrews, Jeffrey, 2016, “Essays on evolution, social behavior and climate change,” PhD, rural sociology


Arenna, 2017, “Consumer Purchase Preferences for Carnosine Enhanced Pork in Canada - A Functional Food,” MSc, agricultural and resource economics


Becker, Marcus, 2016, “Tradeoffs Between Environmental Quality and Economic Returns from Agriculture: A Case Study of the Lower Little Bow Watershed, Alberta,” MSc, agricultural and resource economics

Bentley, Angela G., 2016, “An Investigation of the Effects Of Conversion Pressure And Fragmentation On Farmland Values In Alberta, Canada,” MSc, agricultural and resource economics


Bozan, Ozgur, 2017, “Framing Climate Change Discourse in Turkish Media,” MSc, rural sociology


Cyr, Kaitlyn J., 2016, “Social variables in wetland restoration: the role of values, beliefs, and norms in conservation behaviour,” MSc, risk and community resilience


Godfrey, Todd, 2017, “Mining and Alcohol Consumption: New Evidence from Northern Canada,” MSc, agricultural and resource economics

Kanjilal, Manikarnika, 2016, “Agricultural Producers’ Costs of Adoption of Wetland Restoration Beneficial Management Practice: Estimation and Spatial Transferability,” PhD, agricultural and resource economics

Dairon, Matthew Ryan, 2016, “Exploring southern Alberta energy discourses and web-based survey data quality issues: An application of Q-methodology,” MSc, rural sociology


Lopez, Fabiola, 2017, “Community’s Perspective and Regulations of Cruise Ship Tourism in the Canadian Arctic: Pond Inlet Case Study,” MSc, risk and community resilience

Maruta, Admasu A., 2016, “Heterogeneity in Attitudes Underlying Preferences for Genomic Technology Producing Hybrid Poplars on Public Land,” MSc, agricultural and resource economics

Montenegro Guerra, María, 2016, “Land Rights and Women’s Empowerment in Rural Peru: Insights from Item Response Theory,” MSc, agricultural and resource economics

Muringai, Violet, 2016, “Trust, Perceptions, Intentions and Behaviour in Meat Consumption,” PhD, agricultural and resource economics

Ngo, Sandra, 2016, “Consumer preferences for different sources of vitamin A in Odisha, India and Alberta, Canada,” MSc, agricultural and resource economics
**Journal articles**


Cagdas, A., Jeffrey, S., E. Smith and P.C. Boxall, 2016, Environmental stewardship and technical efficiency in Canadian Prairie canola production, Canadian Journal of Agricultural Economics, 64(3):455-477


Davidson, D. J., 2017, Is urban agriculture and game changer or window dressing? A critical analysis of its potential to disrupt conventional agri-food systems, International Journal of the Sociology of Agriculture and Food 23(2): 63-76

Deishin L., E. Sonmez, M. I. Gomez, and X. Fan, 2017, Combining two wrongs to make two rights: Mitigating food insecurity and food waste through gleaning operations, Food Policy, 68, 40-52


Krogman, N. and G. Machlis, 2016, Sustainability Science and Education in Puerto Rico. A Workshop, Report to the American Association for the Advancement of Science and the Caribbean Division of the American Association for the Advancement of Science, 7 pp


McFarlane, B.L., J.R. Parkins and S. Romanowski, 2016, Expert perceptions of media reporting on a large-scale environmental risk issue: insights from mountain pine beetle management in Alberta, Canada, Canadian Journal of Forest Research, 46, 1-9


**Journal articles (con’t)**

Muringai, V. and E. Goddard, 2016, *Long Term Impacts of Bovine Spongiform Encephalopathy on Beef Risk Perceptions and Risk Attitudes in Canada*, Journal Of Toxicology And Environmental Health, Part A Vol. 79 , Iss. 16-17, pp 746-761


Rieger, J., C. Kuhlqatz and S. Anders, 2016, *Food Scandals, Media Attention and Habit Persistence among Desensitized Meat Consumers*, Food Policy, (64): 82-92


Sherren, K., T.M. Beckley, J.R. Parkins, R.C. Stedman, K. Keilty and I. Morin, 2016, *Learning (or living) to love the landscapes of hydroelectricity*, Energy Research and Social Science, 14, 102-110

Staudigel, M. and S. Anders, 2016, *Does taste trump health? Effects of nutritional characteristics on brand-level demand for chips in the*
Staudigel, M. and S. Anders, 2016, Geschmack vs. Gesundheit: Einflüsse von Nährstoffprofilen auf die Markennachfrage nach Chips in den USA, German Association of Agricultural Economists (GEWISOLA) 56th Annual Conference, Bonn, Germany, Sept. 28-30


Truong, T.D., W.L. Adamowicz and P.C. Boxall, 2017, Modelling the effect of risk perception on preferences and choice set formation over time: Recreational hunting site choice and Chronic Wasting Disease, Environmental and Resource Economics


Wang, H., F. Qiu and X. Ruan, 2016, Loss or Gain: A Spatial Regression Analysis of Switching Land Conversion between Agriculture and Natural Land, Agriculture, Ecosystems and Environment, 221: 222-234


**Books and book chapters**


Huddart-Kennedy, Emily, Maurie Cohen, and Naomi Krogman (Eds), 2016, Putting Sustainability into Practice: Applications and Advances in Research in Sustainable Consumption, Edward Elgar Press, 253 pps


Njuki, J., J.R. Parkins and A. Kaler (eds), 2016, Transforming gender and food security in the Global South, New York: Routledge (11 chapters, 301 pages)


Parlee, B. and Wray, K., 2016, Gender and the Social Dimensions of Changing Caribou Populations in the Western Arctic, in Living on the Land (Kermoal, N. and Altamirano-Jimenez, I. eds), Edmonton: University of Athabasca Press


Machlis, G. and N. Krogman, 2016, “Sustainability Science and Education in Haiti,” A Workshop Report to the American Association for the Advancement of Science and the Haitian Association for the Advancement of Science and Technology, 16 pp


Reports


Machlis, G. and N. Krogman, 2016, “Sustainability Science and Education in Haiti,” A Workshop Report to the American Association for the Advancement of Science and the Haitian Association for the Advancement of Science and Technology, 16 pp


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