



Issue 32

ENVIRONMENTAL STUDIES NEWSLETTER - THE KING'S UNIVERSITY

<http://www.kingsu.ca/faculties/interdisciplinary-studies/environmental-studies>

# 'UP ON THE ROOFTOP'

## *A new weather station at King's*

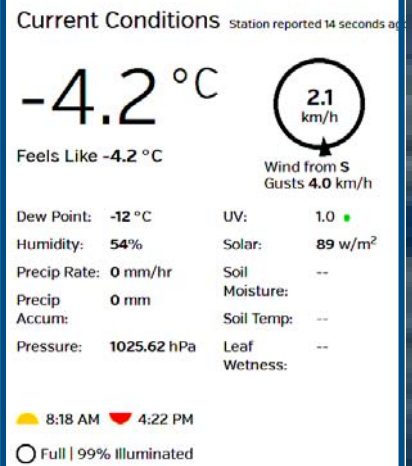


**K**ing's Environmental Studies (ENVS) program was happy to receive a donation from Spectra Energy, employer of ENVS Alum Tim Veenstra, allowing King's to purchase an Ambient Weather WIFI weather station and a Hach Soil Analysis kit. You can find out what the weather is like on campus in real time at the following site: <http://www.wunderground.com/personal-weather-station/dashboard?ID=IALBERTA454>.

The weather station system (*held by ENVS Professor Dr. Harry Spaling in photo*) transmits information from the outdoor sensor array and indoor temperature sensor to the display console, the display console sends and receives internet data using WiFi connectivity. The unit transmits outdoor temperature, humidity, wind speed, wind direction, rainfall, UV and solar radiation from the all-in-one sensor array. You also get dew point and rainfall rate, and a graph provides detailed trends for barometer, temperature and humidity and the sunrise, sunset and moon phase keeps you in touch with your environment.

Photo on left shows students in physical geography analyzing soil samples in the lab using the Hach Soil Analysis Kit.

Thanks to Tim and Spectra Energy for their generous donation.



## Dr. Joanne Moyer joins the ENVS faculty team

Originally, from Lethbridge, AB, Dr. Joanne Moyer spent part of her childhood in Tanzania, East Africa. After studying theology at Canadian Mennonite University in Winnipeg, she pursued further education in environmental studies and natural resources management at the University of Winnipeg (BA), Dalhousie University (MES), and the University of Manitoba (PhD). Her PhD thesis research provided an opportunity to return to East Africa, studying faith-based organizations doing environmental and development work in Kenya. Joanne is thrilled to be working at King's where she can continue to integrate her faith and her environmental interests through teaching and research.



# ENVIRONMENTAL STUDIES

# 2015 ENVIS INTERNS



**Waurner Adema**  
ENVIS / Biology

As a sprayer operator for Strathcona County **Waurner** spent most of his time applying herbicide offering a practical approach to addressing the severity and ecologically devastating nature of invasive plant species. He undertook a soil and vegetation study of the county's roadsides and participated in a biophysical assessment determining the fate of a candidate property as a municipal or environmental reserve. Waurner was introduced to the science of Arboriculture, attended a Dow Chemical Conference, and toured the Maxxam Analytics facility to learn about water and soil analysis. Waurner says that he worked with a great group of people at Strathcona County who provided insights into different career paths including environmental consulting, well capping, and environmental planning.

**Samantha** completed an internship at The Mustard Seed, this past summer. Her main role to facilitate the care and maintenance of community gardens in Edmonton's inner city. She was able to do this by building relationships with members of this community. In addition to community gardens in the Boyle McCauley neighbourhood, she and her co-workers made weekly trips to the Lady Flower Garden just Northeast of the city. Lady Flower Garden is based around the idea of community development and wellness. It is a collective effort of various inner city agencies. Their trips to the garden were the highlight of the week for many eager participants. The opportunity to watch participants interact with each other, work the land, and hear their testimonies of the peace of mind the garden brought them was an unforgettable experience for Samantha. In addition to the gardens, she also co-coach to The Mustard Seed's baseball team. In which she was responsible for organizing the transportation, meals and equipment for the team, while creating a safe, fun and respectful environment for participants.



**Samantha Flasha**  
ENVIS / History

**Daniel** worked a student wildlife technician with the Canadian Wildlife Service (CWS) this summer, primarily working with waterfowl. He did three distinct jobs over the summer starting with the annual air-ground survey done throughout southern Alberta. This entailed driving along pre-set sections of gravel road with a pair of binoculars and counting/identifying every duck on any waterbody within 200 meters of the road. He then added the findings to an existing database in order to get an estimate on population sizes for different species of duck to set appropriate hunting regulations. The second job that Dan did was to survey 15 lakes in Alberta in which he looked for a black waterfowl species called Scoters. Dan added their findings to a database to acquire an estimation of population size. He used a boat along transects in each lake and kept count of all the scoters. The most exciting and final part of his job was banding ducks in Fairview, Alberta. For this he baited desirable spots along the shores of lakes with grain seed, waited for ducks to find the grain and start eating it, and then set up a large netted trap to catch them. Dan and his co-workers managed to band over 3500 ducks in the 35 day span in Fairview area. Being able to handle live ducks was an experience Dan will never forget.



**Daniel Knop**  
ENVIS / Biology

## King's Keepers

King's Keepers hosted two geocaching events which capitalized on the beautiful fall weather and allowed students a break from the confines of their academic life. Geocaching was a great way for the King's Community to connect with the natural environment. This goal orientated, but low pressure activity also helped to promote community. In addition to geocaching, the club engaged prospective students at King's open house by offering sustainable fair trade chocolate to passersby's.

Next semester, the club hopes to host their annual two week ESC (Environmental Sustainability Challenge) which will include bike powered

smoothies and a keynote speaker. The purpose of this annual event is to promote environmental stewardship within the King's Community including various personal sustainability challenges.



Waurner Adema (ENVIS / Biology) King's Keepers president

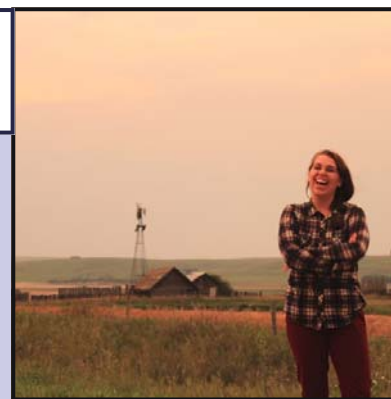
# ENVIRONMENTAL STUDIES



**Carmen's** summer internship was spent at Andrukow Group Solutions Incorporated located in Provost, AB. Andrukow Group is an agribusiness inputs company. They supply products and services such as fertilizer, pesticides, crop checking and soil testing. She was responsible for loading and unloading bulk fertilizer, loading and recommending pesticides for farmers, assisting in crop checking and the mapping of test plots. The majority of her job was spent in conversation with farmers and with eyes always on the sky, a conversation about weather was never far away. During her internship she learned about the modern techniques of farming. She was able to practice plant identification and was accountable for the maintenance and inventory of the chemical shed. Carmen was given a unique view of the diversity, struggles and joys that accompany the changing world that is agribusiness.

### Carmen Noble

ENVS / Philosophy



### Karyn Roseboom

ENVS / Biology

While literally bushwhacking in the dense forests of BC, Karyn would do GPS surveys and draft out the blocks of land for logging companies to potentially harvest. She also mapped the location of the WTP's (wildlife tree patches), collected data from streams and other environmental data collection. While mapping the blocks of land, she and her co-workers would assess various aspects of the land including where roads could be constructed to assist the future logging trucks. Karyn felt this internship provided excellent field experience.

This summer **Karyn** worked at Fortec Consulting (Forestry consulting company) based out of Terrace BC. Karyn worked primarily in other areas of BC including Hudson's Hope, Chetwynd and Anahim Lake. She worked through weather systems ranging from thunderstorms to snow squalls.



This summer **Mike** worked for ACE Vegetation Control Services Ltd. based out of Nisku, AB. Their services include weed spraying, mowing, and brushing for the oil and gas industry. He was stationed in northern Alberta between Conklin and Ft. Mackay and worked on remote sites. He accessed these sites via an Argo which is an amphibious machine with tank-like attributes, because of the water holding muskeg terrain of northern Alberta. Mike's tasks consisted of safety precautionary measures, meeting with clients, eradicating invasive species of plants, and recording all observations. These tasks were conducted under the Alberta Weed Control Act which is put in place to manage noxious weeds that inhibit the flourishing of natural plant species. He worked with some of the top oil producing companies in western Canada such as Suncor, Canadian Natural, Syncrude and Imperial Oil. He also was able to work directly with landowners in rural Alberta. Mike said that he gained relationships that will last a lifetime and worked for a company that wanted to see him succeed in his future endeavors.

### Michael Stone

ENVS / History



### Miranda Tuininga

ENVS / Biology

**Miranda** worked for DWB Consulting, based out of Prince George BC and servicing BC's northern forests. Amidst the swarms of bugs, she put on her bug hat and chest waders, a 30 pound vest and 60 pound electro fisher to be ready for her workday. She then proceeded to bushwhack 4 km through the forest with her co-worker. Electrofishing was one of the many things she learned this summer. She also did stream assessments, plant identification and soil typing for proposed cut blocks. She did a lot of bushwhacking, quadding and driving down the network of forest service roads in central B.C. "It was a summer full of long days, abominable bugs, fantastic views, lots of wildlife, and so many trees" says Miranda, "through this job, I gained a new appreciation of the outdoors and a better understanding of the forestry industry."



**Heather Gilker** (nee Moore) ENVS / Biology 1999

Heather is back at King's University and working in the Micah Centre.



**Teresa Looy** ENVS / Psychology 2013

In June 2015, Teresa presented at the Canadian Association of Geographers

meeting in Vancouver "Action for sustainability through community gardening". And the International Symposium on Society and Resource Management in Charleston, South Carolina, "Predicting pro-environmental behaviour from significant nature-related experiences in childhood".

**Evan Hammer** ENVS / Sociology 2009

When in transition between his job at Habitat for Humanity to a Master's program at UBC, Evan toured the California coastline starting at San Diego, including a hike through the Redwoods. He stayed at "hostels perched on the coast, and strolled windy trails leading to light-houses with overlooks to spot dolphins and whales." After his travels, Evan returned to Vancouver to begin his Urban Planning Master's program. The program thus far has ranged from bike infrastructure design initiatives, international development, disaster reaction plan and developing strategies on how to empower neighbourhoods. Evan, and a team of students, entered an ideas competition addressing sea-level rise, called 'RISE'. One idea his team came up with was to create legislation that would give cities power and money to engage in long term plans for change, and enabling them as well to quickly respond to the rise of sea levels and disasters. Evan is looking forward to all the challenges, learning and friendship that his Master's program will bring.

**KING'S ALUMNI:** *There are many benefits to staying in touch with the King's Alumni community. Visit King's alumni webpage—<http://www.kingsu.ca/alumni-friends/alumni> and King's alumni facebook page—<https://www.facebook.com/TKUCAumni>*

## Environmental Studies Program

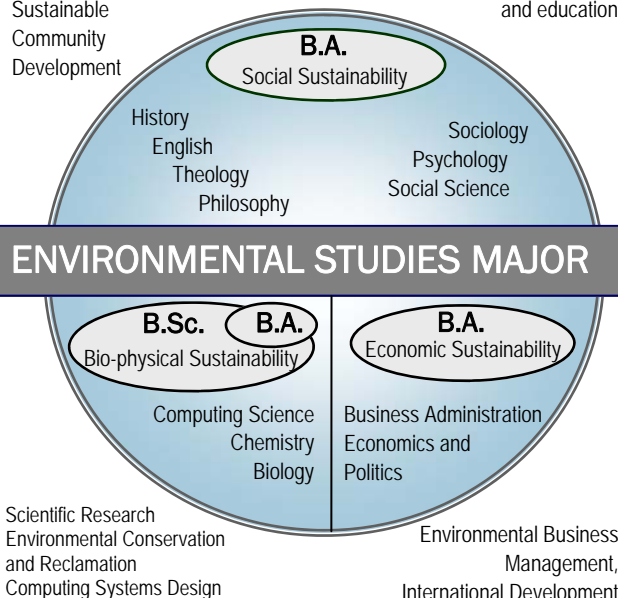
We live in a unique and important time in history. This generation has an opportunity to address human caused detriments on natural systems including declining fish stocks, forests, water supplies, and agricultural yields worldwide. Challenges such as global warming, depletion, food security, and poverty have reached critical stages. In the midst of all of this, more people live in the world due to exponential population growth, yet the resources these people depend on for their ways of life are being exhausted at increasing rates.

If you see yourself as an agent of change helping to solve dilemmas like these at scales ranging from local to global, then the Environmental Studies (ENVS) program at The King's University is for you! ENVS at The King's University is rooted in principles of stewardship and sustainability. Through the ENVS B.Sc. or B.A. degree, you will discover that the environmental issues are not simply a scientific dilemma - they are linked to social, economic, and spiritual realities. You will learn to understand the big picture while you focus on the intricacies of your chosen natural sciences, social sciences, or arts concentration.

### Potential Careers:

Sustainable  
Community  
Development

Public awareness  
and education



Each student chooses a concentration in either Humanities or the Social Sciences (**B.A.**) or the Natural Sciences (**B.Sc.**). ENVS courses emphasize environmental stewardship and sustainability, and then further develop these principles within the various concentrations. Concentration choices include Biology, Chemistry, Computing Science, History, Sociology, Philosophy, Business Administration, Economics and Politics, English, Theology, Psychology, Social Sciences, all taught from an environmental perspective. Geographic Information Systems (GIS), Environmental Impact Assessments (EIA), Resource Planning and Environmental Management are technical training opportunities available within the ENVS program.

*The King's University Environmental Studies Program  
was the first professionally accredited B.A. in Environmental Studies in Canada!*

The **ENVS Footprint Newsletter** is published by the Environmental Studies Department of **THE KING'S UNIVERSITY**  
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