

# **Recruitment into Agricultural Careers: Strategies to Increase Enrolment in Agricultural Colleges and Universities, in order to meet the Growing Number of Job Opportunities.**

## **FINAL REPORT**



By: Karen Daynard, 2010 Nuffield Scholar

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# Executive Summary

It is well documented that there are many more jobs in agriculture than there are people to fill them, and the gap is growing rapidly as the number of students studying agriculture at a post-secondary level drop.

This study looks at strategies various colleges and universities across Canada, the United States and Europe use to recruit new students into agricultural studies.

Successful recruitment strategies involve smart marketing techniques, including gathering a deeper understanding of the reasons why students choose where to study; perceptions of careers in agriculture, and developing messages that satisfy the queries of parents, potential students, and peers of potential students. Parents and students are looking for different things from a school, and 'buzz words' such as environment, social issues, green, technological, water, air, soil, and sustainable all matter. Students are looking to do more than study – they want to be part of a team with similar, outward-looking goals.

Recruitment should be an industry-wide goal, not just an institutional challenge – and furthermore, institutions should worry less about competing with each other, and more about branding the depth and diversity of career options that are open for students of agricultural, food or rural studies. It's less about where students go, and more about reaching them with the message that agriculture is an industry with an unlimited number of opportunities now, and into the foreseeable future.

The other issue is funding. Universities and colleges do not have the funds available to launch 'cool' recruitment campaigns, and this again is where industry can help. Whether it is money to fund a campaign, hosting career days, or providing busses to bring potential students to campus, there are lots of opportunities for their involvement.

Recruitment into agriculture should not be a tough task. Agriculture is cool. It is green. It is sustainable and it is feeding the world with safe, inexpensive food. Institutions need to think differently about how they market their programs, really look hard at how they are perceived by potential students, and seek opportunities to work with the industry, and each other to share their great messages.

I foresee that in the future, the trend will change as the economy struggles. I believe industry wants to get involved, and is now just seeing the problem as they begin to have to search and compete harder for top new employees. And I think that other farm organizations, such as Ag in the Classroom and 4-H will take a larger role in showcasing career options.

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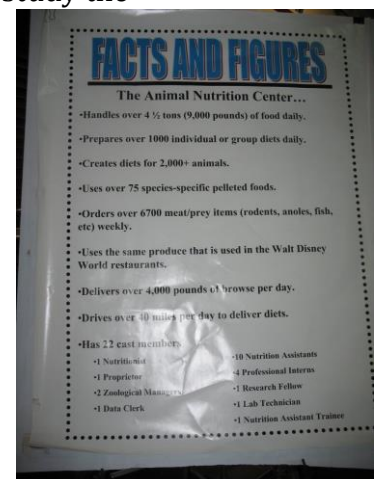
## FOREWARD

I have long been involved with agricultural communications. The passion to tell the consumer what exactly we do on the farm started in my teen years, through involvement in the Ontario 4-H Program. Once I began studying animal science at the Ontario Agricultural College (OAC) at the University of Guelph, though, I really began to see the need to bridge the gap existing between rural and urban dwellers. Through hours of volunteer work at the Royal Agricultural Winter Fair in Toronto, I saw first-hand many of the misconceptions which the public holds about modern agricultural practices.

I was told that “milking machines hurt the cow”, “milk was really just pus coming from the udder”, “meat consumption equalled world hunger”, “cows were the main cause of global warming”, “farmers were unintelligent”, and of course “all farming was now done by massive, evil, corporations, who only cared about money.” I heard these myths 25 years ago, and still hear them today. In Canada, only 2% of the population farms, so it’s a long road to awareness, but I’m continually impressed that so many people stay committed to speaking up for our industry.

The one thing that amazes me continually about our agricultural industry is the diversity of careers which are available. While acting as editor for the OAC Alumni newsletter, I had the opportunity to meet many fascinating people – all who had an agricultural degree or diploma – but who were in careers that seemed to be entirely unrelated to the industry, until one looked closer. A few of the people I met included:

- **Ann**, who manages projects in developing countries including water filter projects in Indonesia and Myanmar, orphanages in Thailand and Sri Lanka and nutrition and medical programs in Papua New Guinea.
- **Isobel**, who flies on NASA’s suborbital research aircraft in order to study the composition and chemistry of the atmosphere and was involved in looking at ways to decrease the pollution levels over Beijing prior to the Olympics.
- **Shana**, who is working to rehabilitate the original gardens on the Island of Alcatraz, restoring them back to the way they were when the families of prison guards had to grow their own food, and prisoners were rewarded with garden time.
- **Mike**, a Master Blender for Hiram Walker and Sons Ltd who travels around the world looking for the quality commodities to make fine whiskeys, rums, Kahlua and more.
- **Eduardo**, the head of animal nutrition at Disney’s Animal Kingdom, in charge of creating diets for over 2000 animals daily.



But more than these very ‘cool but unusual careers’, I realized that the agricultural industry employs and requires people in more traditional jobs including veterinarians, teachers, lawyers, accountants, human resources, technology, computers, chemists, scientists, electricians, plumbers, mechanics and so much more. Indeed many people who work in the industry, especially farmers, are experts in more than one of these areas.

So while there are so many career options in agriculture, why are many of the jobs going unfulfilled? Why if it’s such an exciting time in the industry, are enrolments dropping at

the majority of agricultural colleges and universities in not only Canada, but in most of the developed countries?

My personal affiliation is with the OAC who currently account for only 8% of undergraduates at University of Guelph, a number which was dropped to about 260 full-time students, from approximately 400 in the late 1980s.

In 2009, under the direction of the president, OAC was assigned a cut of more than 40% of its budget over three years. The cut to teaching exceeded 50%. In my, and many other alumnus's opinions, one cannot cut half of the teaching force and still retain a top quality of education – the reason many students chose Guelph. In addition, OAC, although having the lowest number of students, by far raised the most money for the University, in terms of research. It also had the highest graduate employment rate with many students getting jobs, and some receiving signing bonuses in their 3<sup>rd</sup> year of study.

Since the cuts were based on student numbers, it was imperative that something needed to be done to recruit more students, but before beginning, many questions needed to be answered. How best to accomplish this? Why does the problem exist in the first place? Where might the money come from in order to launch any communications campaign?

This is why I applied for a Nuffield Scholarship. I wanted to understand the factors behind this enrolment decline. Without understanding the issue, we couldn't begin to reverse the trend.

## **ACKNOWLEDGMENTS**

I have many people to thank, but no one more important than my parents. Not only have they always supported me in my career choices, but they were also willing to help me manage during the many times I was away with Nuffield. It is thanks to them that my place stood, my plants flourished and my pets thrived.

I would also like to thank the following:

Dr. Rob Gordon, Dean of the Ontario Agricultural College at the University of Guelph

Dr. Mary Buhr, Dean of the College of Agriculture and BioResources at the University of Saskatchewan

The Canadian Faculties of Agriculture and Veterinary Medicine

Vineland Research and Innovation Centre

Ann Gordon, Project Manager, Mennonite Economic Development Associates

And of course: Nuffield Canada

## **ABBREVIATIONS**

Cal Poly	– California Polytechnic State University
CFAVM	– The Canadian Faculties of Agriculture and Veterinary Medicine
FCC	– Farm Credit Canada
FNSEA	– La Fédération Nationale des Syndicats d'Exploitants Agricoles
NSAC	– Nova Scotia Agricultural College
OAC	– Ontario Agricultural College, University of Guelph
UBC	– University of British Columbia
U of A	– University of Alberta
U of M	– University of Manitoba
U of S	– University of Saskatchewan
US	– United States of America
USDA	– United States Department of Agriculture
UC Davis	– The University of California at Davis

## OBJECTIVES

My Research Goals were as follows:

1. What factors/who currently influence high school students in their further educational decisions?
2. What resources do students use and/or need when making a decision on further education?
3. How are agricultural colleges and universities currently recruiting students?
  - What strategies have been successful?
  - What strategies have failed?
  - What initiatives already exist in Canada?
  - What other studies have been done?
4. Where are the funding opportunities for new communications/recruitment strategies?

### Universities Visited

University of Florida

University of California - Davis

California State - Fresno

Cal Poly

Texas A&M

Mississippi State

Royal Agricultural College, England

Harper Adams University, England

Scottish Agricultural College, Scotland

Wageningen University, The Netherlands

Le Nivot, France

University of Manitoba

University of Alberta

University of Saskatchewan

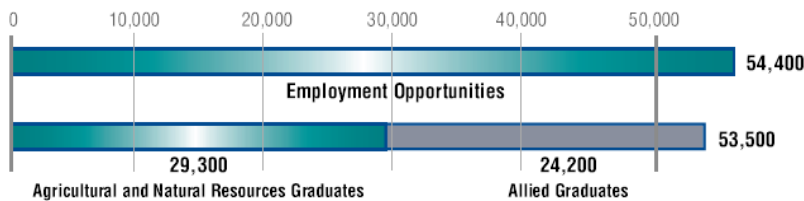




## Chapter 1: THE ISSUE

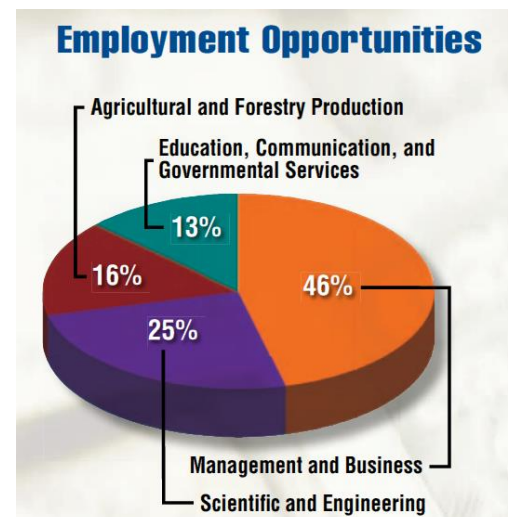
The issue is easy to define – there are thousands more jobs in agriculture than there are people to fill them. A USDA study entitled “Employment Opportunities for College Graduates in Food, Renewable Energy, and the Environment. United States, 2010-2015” by Allan D. Goecker amongst others suggests that over the next five years, approximately 54,000 jobs in the food, renewable energy, and environment employment sectors would become available annually. Of these jobs, only 29,000 would be filled by graduates from colleges of agriculture and life sciences, forestry and natural resources, and veterinary medicine. The other 45 percent, an estimated 24,200 graduates, will come from related disciplines including biological sciences, engineering, health sciences, business, and communication.

Figure1.



Source: Employment Opportunities for College Graduates in Food, Renewable Energy, and the Environment. USDA, 2010-2015

Figure 2.



Source: Employment Opportunities for College Graduates in Food, Renewable Energy, and the Environment. USDA, 2010-2015

The authors noted that these numbers reflected, that during the next five years, five percent more college graduates will be needed, when compared to the last five years. However, there were nearly 10 percent fewer agriculture and life sciences, forestry and natural resources, and veterinary medicine graduates produced in U.S. colleges and universities in 2008, than in 2002.

Of these graduates, 74% of job openings will be in business and science occupations; 15 percent in agriculture and forestry production and 11 percent in education, communication, and governmental services.

The strongest demand is for graduates with college degrees and related work experiences in agriculture, forestry, and environmental science and management. Annually, an average of 29,300 graduates are expected from colleges of agriculture and life sciences, forestry and natural resources, and veterinary medicine.

The study estimates that between 2010-2015, there will be:

- About 25,700 annual job openings for management and business representatives in food systems, renewable energy, and the environment.

- More than 14,600 annual job openings in science, engineering, and related professional specialties.
- 7,900 annual job openings in agricultural and forestry production occupations—the foundation of the U.S. food, agricultural, and natural resource system.
- Greater than 6,200 annual job openings in education, communication, and governmental operations involved with agricultural and food systems, renewable resources, and the environment. Graduates who are highly skilled in multi-media operations will be most sought-after. Governmental agencies are expected to hire graduates with expertise in food safety and security, and natural resources and environmental management.

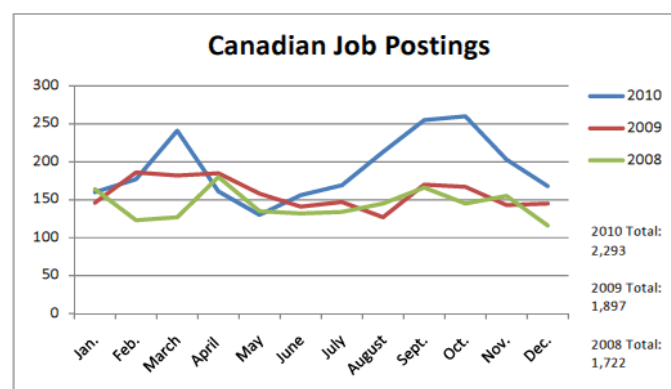
Another study by Camp, et al. in Illinois looked at problems just recruiting teachers for agricultural high school programs. Their findings showed that “as many as 38 of the 50 states are unable to graduate enough agriculture teachers from university agricultural education programs to meet the demand for new high school agriculture teachers. The researchers estimated that high school and university agriculture programs would have to more than double enrolments to satisfy the growing demand for agricultural education graduates by both industry and education. The lack of adequate high school agriculture enrolment has translated at the post-secondary level into fewer students with agricultural training entering colleges of agriculture. The inability of colleges to recruit and retain students with agricultural backgrounds relates directly to decreased enrolments at colleges and universities.

Looking at the Canadian scene, while unemployment rates rose during the recession, the number of job postings in agriculture went the opposite way. A job report done by AgCareers.com in 2010 showed job postings had risen by 23% over one year. They noted that “agriculture is a vital industry to the well-being of people around the globe that is somewhat isolated from economic downturns.”

Across the country, job postings on AgCareers.com keep rising. From 2007-2008 there was a monthly increase of 700 jobs posted and to add to the employment data, 63 % of AgCareers.com clients expected 10% retirement levels in their companies within two to five years.

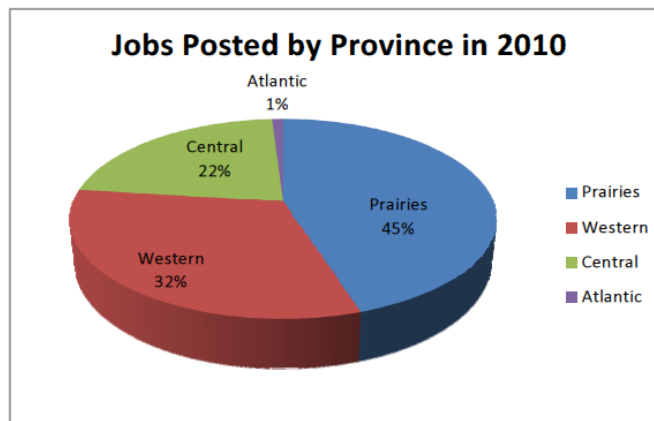
Note that the following graphs refer to agricultural job postings, not all jobs.

Figure3.



Source: AgCareers.com, 2010

Figure 4.



SourceAgCareers.com, 2010

#### Canadian Regions

**Atlantic-** New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island (up 14% from 2009)

**Central-** Ontario, Quebec (up 35% from 2009)

**Northern-** NWT, Nunavut, Yukon (no change)

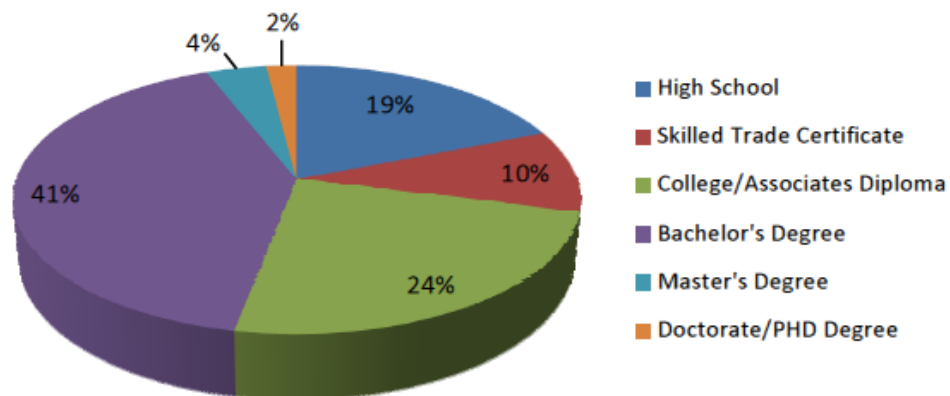
**Prairies-** Manitoba, Saskatchewan (up 9% from 2009)

**West-** Alberta, British Columbia (up 34% from 2009)

Additionally, most of the job postings (47%) required a bachelor's degree or higher, while 19% of posted jobs required a minimum of a high school diploma. Ten percent required a skilled trade certificate, while 24% required a college or associate diploma.

Figure 5.

#### Job Postings by Education Requirement



Source: AgCareers.com, 2010

Breaking these numbers down into specific careers reveals information on what skills are needed. A 2009 Enrolment and Employment Outlook report conducted in partnership between AgrowKnowledge and AgCareers.com showed the following results.

Figure 6a. **Job Opportunities by Career Cluster 2006-2008**

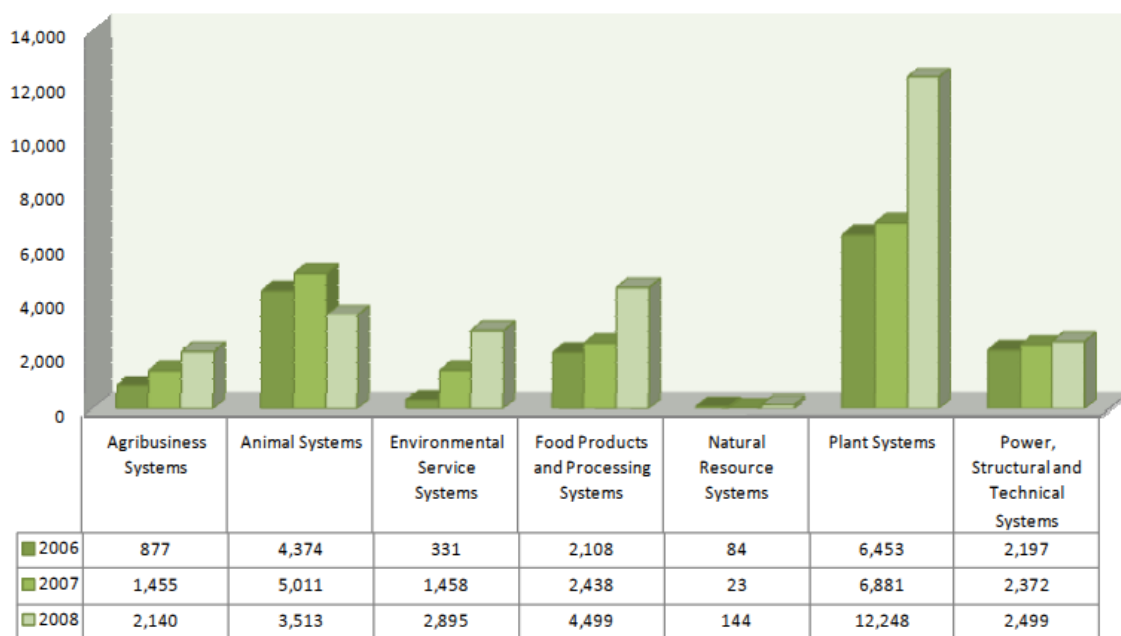
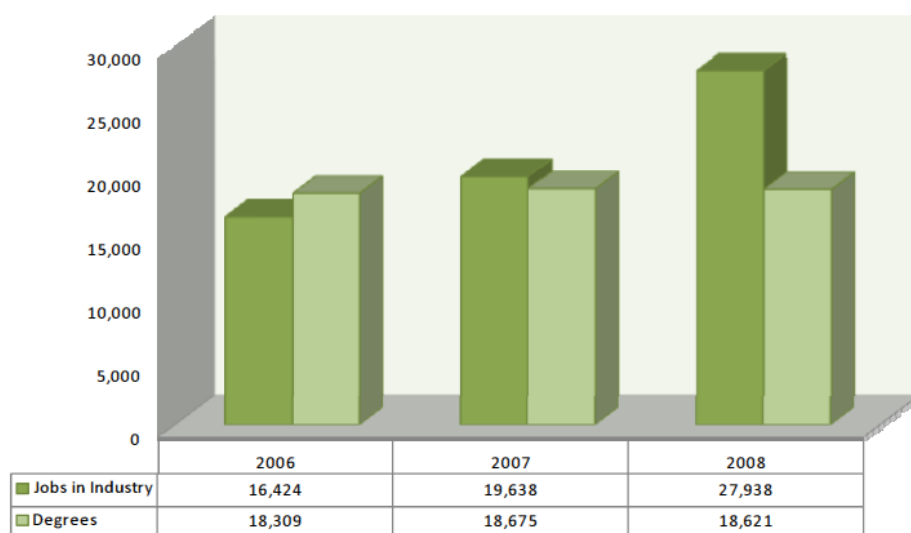


Figure 6b. **Agriculture Graduates versus Employment Opportunities 2006-2008**



Source: AgrowKnowledge, AgCareers.com, 2009

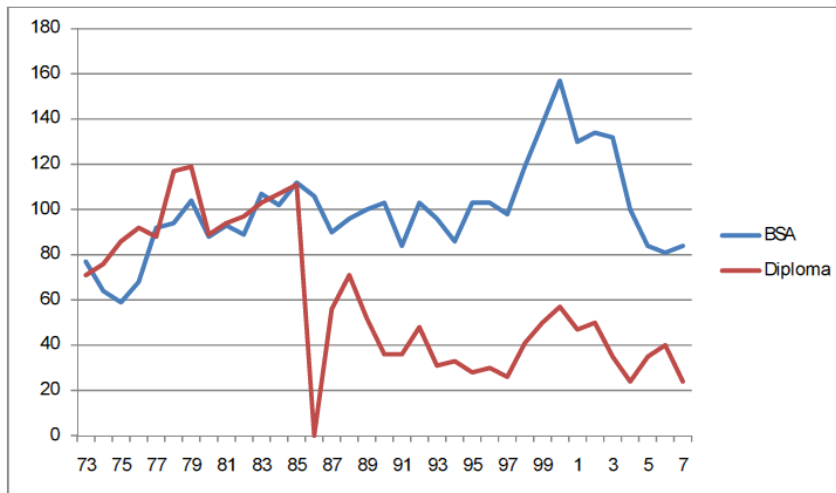
According to the report, “in 2006, 39% of the jobs were in Plant Systems, a major which led throughout the whole study. Animal Systems was the second highest opportunity for employment in the years 2006 and 2007 with ~26% of all job openings.”

Looking at enrolment rates, rather than job openings, a report by Bryan Harvey, commissioned by the Canadian Seed Trade Association in 2007, noted that “Canada's national priorities for science and technology do not include agriculture, and thus government funding for research in agriculture is suffering.”

A result of this lack of prioritization is reduced numbers of faculty in agriculture and the view from students that this is a less desirable area in which to establish a career.

Figure 7

Figure 1 Graduates in BSA and Diploma Programs at the University of Saskatchewan 1973-2007



Source: CFAVM, 1997

decreased from approximately 400 to just under 300. Ph.D. graduates have decreased from 150 to less than a hundred.

Another study on Enrolment Trends in Canadian Faculties of Agriculture by Ian Morrison in 2009 showed similar results.

The Canadian Faculties of Agriculture and Veterinary Medicine (CFAVM), an organization consisting of Canada's eight faculties of agriculture and four of veterinary medicine has tracked enrolment trends in their undergraduate agriculture programs since 1996/97.

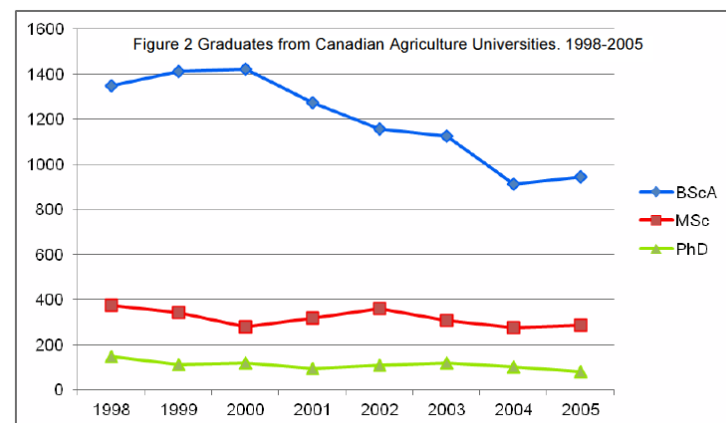
From west to east, the eight Faculties of Agriculture are as follows:

University of British Columbia  
University of Guelph OAC

Data from the deans of the major agricultural colleges and universities shows a drop in overall agriculture graduates within Canada from 1400 in the 1990's to just over 900 in 2005 – a drop of over 30%.

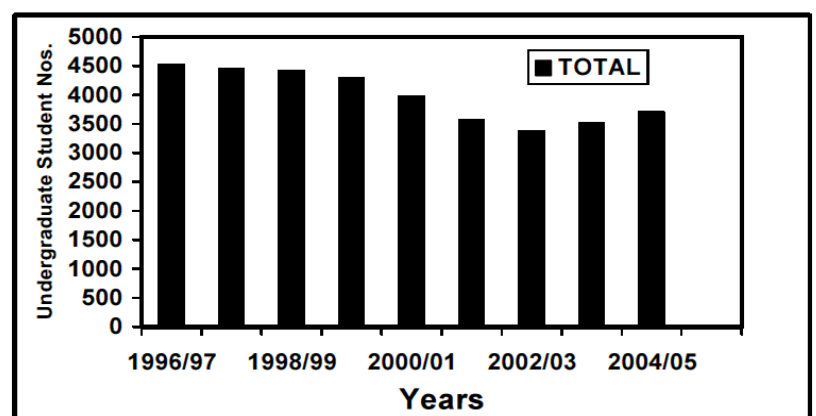
Looking at graduate students, M.Sc. graduates have

Figure 8.



Source: CFAVM, 1997

Figure 9.



Source: CFAVM, 1997

University of Alberta  
McGill University  
University of Saskatchewan  
Université Laval  
University of Manitoba  
Nova Scotia Agricultural College.

All of the eight Faculties of Agriculture, like their counterparts elsewhere in the developed world, have encountered declining undergraduate student enrolment in most programs, including agricultural and resource economics and agricultural business management at about a rate of 25%. Yet at the same time overall enrolments at the same universities rose nationally by 20%.

In some Faculties enrolment in newer programs such as those in the environment, resource management and conservation studies, have appealed to new students, but not enough to compensate for the decline in the more traditional programs.

Morrison noted that while “Animal Science (including pre-vet), agronomy, and crop/plant science majors still constitute a significant proportion of students in agriculture whereas student numbers in some specialized majors such as soil science, pest management or crop protection, and agricultural chemistry have all but disappeared.”

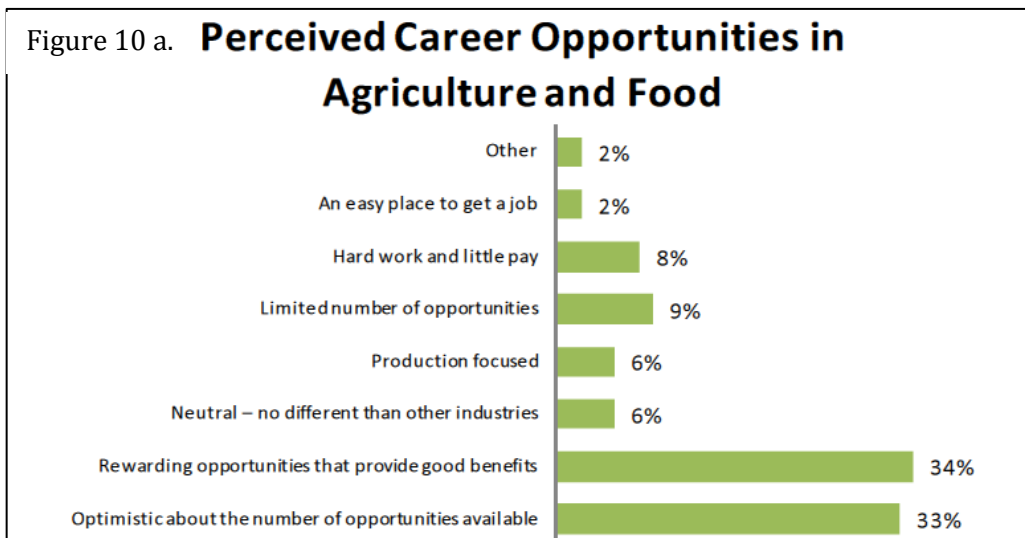
## Chapter Two: The View from Outside

So what is the problem? There are lots of jobs, but not enough students. As with everything else there are numerous factors involved - all of which play into this recruitment issue.

1. Agriculture is looked at, by outsiders, as being completely labour-intensive with long hours, little pay, no holidays, little access to technology, and little room for advancement. The scope of the ag industry is not known at all – agriculture is only associated with farming and thus an agricultural degree or diploma is only a gateway to production agriculture – something not attractive to most.
2. A reduction in numbers of farm families - traditionally the main source of students choosing to study agriculture. Students, let alone their parents and teachers do not know the opportunities existing in agriculture.
3. Most of the population is urban, and they have little understanding of agriculture or the food production system. Most of what they hear in the press relates to food recalls, environmental harm, negative impacts of pesticides and genetically-modified crops, animal abuse and the evils of factory farms and multinational corporations.
4. Competition from other institutions, e.g. four-year applied degrees at colleges, or from within the same institution (i.e the University of Guelph offers both an Animal Biology (zoology program) and an Animal Science degree (OAC)).
5. Many farms these days, especially those who are in start-up mode, require off farm income which leads to the image that agriculture is a low paying option.
6. In Western Canada, many of these individuals find employment in mining, with the oil patch or similar lucrative jobs with high salaries and little incentive to leave for further education and training.
7. Food is taken for granted in today's society; the proportion of income spent on food is the lowest in the history of humankind.

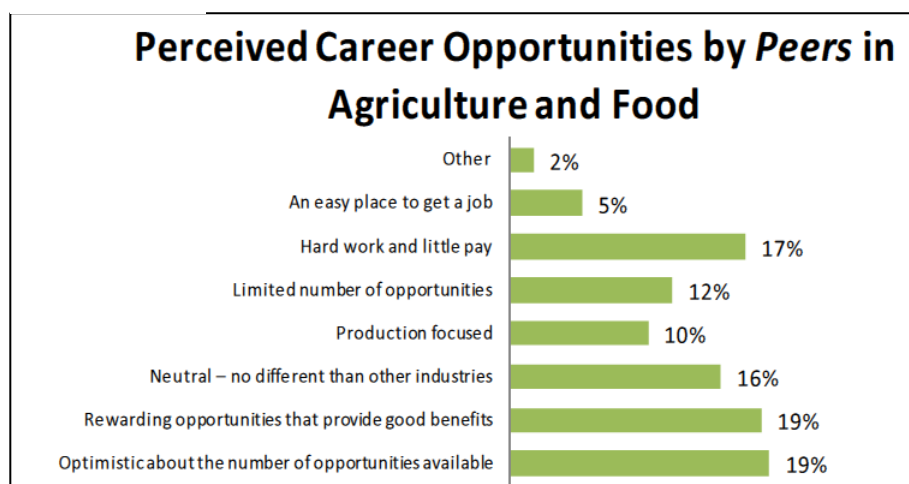
Part of the 2009 Enrolment and Employment Outlook report by AgrowKnowledge and AgCareers.com featured a “**Perceptions of Agriculture**” Online Survey. One hundred men and women currently pursuing or planning to pursue higher education were polled. Respondents did not have to be looking towards a career specifically in agriculture.

The results showed that “optimistically, both groups of students that responded thought agriculture has rewarding opportunities and many opportunities to offer. The major difference is the peers who are not directly involved in agriculture view it as a field that is hard-working with little pay and has primarily production based jobs.”



Source: AgrowKnowledge and AgCareers.com, 2009 Enrolment and Employment Outlook

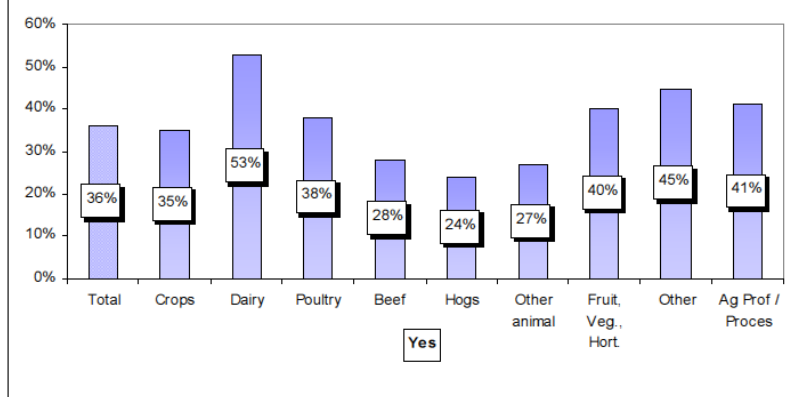
Figure 10



Source: AgrowKnowledge and AgCareers.com, 2009 Enrolment and Employment Outlook

One report found during the research for this Nuffield report was really disheartening. A Farm Credit Canada on Optimism in Agriculture in Canada done in 2007 asked farmers “Have you recommended a career in agriculture.” The answers showed less than half of those interviewed had actually done so. Turning it around, this means that more than half of the people had NOT recommended a career in agriculture.

Figure 11. **Have you recommended a career in agriculture?**



Over the past year, have you recommended a career in agriculture or an agricultural family member? (n = 3647)

Source: Farm Credit Canada, 2007

The study followed up the question with another one asking “Why would you encourage / discourage an agriculture career?”

- “Respondents stated that agriculture is a good lifestyle choice (12%), that there are a lot of opportunities in



agriculture (10%) and that agriculture production is necessary for the sustainment of existence in Canada (7%). However, respondents were cautious about recommending a career in agriculture because they felt farming did not provide financial stability (14%), there may not be financial words for their efforts (12%) and there is uncertainty about the future of agriculture (8%). A sample of the comments is detailed below.”

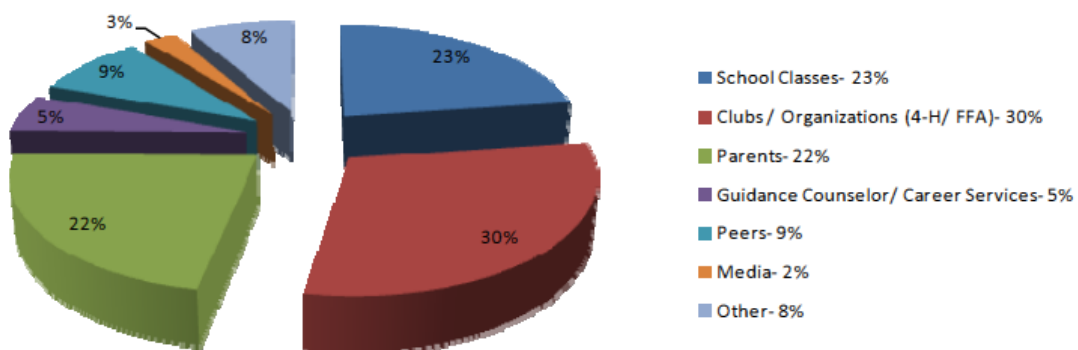
- “I would encourage them because I believe that agriculture is a profession that provides new challenges and opportunities on a daily basis. I would caution that it is also a career that involves long hours with little return at times, especially if one's chosen agriculture path is as a producer of the raw product. That said, I have not done anything else in my life that offers such a sense of accomplishment or provided me with as much personal growth, as my agricultural career.”
- “I would discourage someone from a career in agriculture because, even though I try to keep a positive attitude and be optimistic, in the back of my mind, I'm not sure farming has a very bright future. If I had to start over right now, I wouldn't be a farmer - it is almost financially impossible.”
- “There remains significant untapped potential in the ag industry. Most people define the industry too narrowly. When their perspective is broadened, they too can begin to see new possibilities.”
- “If someone wants to farm, it's in them and they will find a way to do it, it's in their blood. No one can take it out of us, but stress can shorten their career in agriculture. People need a second or third job in order to farm today.”
- “Agriculture is incredibly rewarding. To see plants and animals grow to maturity in harmony with nature for the nourishment of people is a privilege few get. The downside is sometimes it's hard to be profitable.”
- “Long hours, lots of stress, huge capital investment, poor cash flow, always at the mercy of the current market place No other business accepts whatever value your buyer feels like giving you that day.”
- “We see the same opportunities in value added products if the farmer is willing to spend time marketing, not farming. Farm only if you want it to be your whole life. It is not a job - it is a total commitment, such as priesthood.”
- The worrying part is that if people who are active in the agricultural industry cannot recommend their own job to a young person looking at career options, then who will be advocates for agriculture?

## Chapter Three: INFLUENCERS

Going back to the original goals of this Nuffield study, was a question as to who exactly influences students to make decisions about further education and career options - and to what degree that influences matters.

The AgrowKnowledge and AgCareers.com study showed that ninety percent of the students who participated in their survey were already taking agriculture courses or were planning to pursue an agricultural career, as showcased in the figure below. It distinctively shows that students who were already involved in an agricultural organizations, such as 4-H, or Future Farmers' of America (available in the US only), were easily influenced to study agriculture as they were predisposed to the opportunities.

Figure 12 **Agricultural Studies Influencers**



Source: AgrowKnowledge and AgCareers.com, 2009 Enrolment and Employment Outlook

In 2006, California State University, Fresno, undertook a study into the “Factors influencing matriculation decisions of College of Ag Sciences and Technology Students.” Professors looked at how various recruitment efforts affected decision-making process of 411 first semester students.

In discussions with the recruitment staff at Fresno, the following was shared:

### USEFULNESS OF INFORMATION SOURCE (in order of degree of influence)

1. Personal conversation with professor
2. Participation in on-campus recruitment program events
3. Participation in student events
4. Visit to campus
5. Website

### FACTORS AFFECTING SCHOOL CHOICE

#### Most Important

1. Opportunities after graduation
2. Preparation for employment
3. Cost
4. Distance from home
5. Variety of majors offered

### Least important

1. Prominence of university athletic teams
2. Competitiveness of admission standards
3. Prestige of university
4. Size of classes
5. Availability of financial aid

### KEY INFLUENCERS (in order of importance)

1. Parent or guardian
2. High school ag science teacher
3. Friend already in that college
4. High school guidance counselor
5. Friend in high school

### AGE STUDENTS BEGAN TO THINK ABOUT SELECTING A COLLEGE

28% - During the 11<sup>th</sup> grade

20.6% - Before the 9<sup>th</sup> grade

Similar results were found in a study done by Levon T. Esters, Assistant Professor Iowa State University and Blannie E. Bowen, Professor the Pennsylvania State University. Their study “identified factors influencing the career choice behaviors of students who graduated from an urban agricultural education program.” A secondary purpose was to identify factors that discriminated between individuals who choose careers in agriculture and those who did not.”

As the tables below show, “students in the study indicated their parents and friends as the individuals most influencing their choice of a career. The events and experiences reported by former students who chose a career in agriculture focused around several themes which included career opportunities, high school educational experiences, and work

Table 1  
*Individuals' Level of Influence on Former Students' Career Choice (n = 78)*

Individual	Males (n= 26)			Females (n= 52)			Overall (n=78 <sup>a</sup> )		
	Rank	M	SD	Rank	M	SD	Rank	M	SD
Mother or female guardian	2	2.84	1.63	1	3.00	1.50	1	3.05	1.53
A friend	1	3.16	1.57	3	2.60	1.61	2	2.82	1.60
Father or male guardian	4	2.40	1.50	2	2.69	1.52	3	2.69	1.52
Another family member	3	2.80	1.68	4	2.52	1.44	4	2.66	1.52
Another teacher	6	2.28	1.34	5	2.37	1.59	5	2.44	1.56
An agriculture teacher(s)	5	2.32	1.46	6	2.13	1.55	6	2.35	1.58
Guidance counselor	7	2.16	1.41	7	2.00	1.40	7	2.13	1.43

*Note.* Scale: 1 = No Influence, 2 = Very Low Influence, 3 = Low Influence, 4 = High Influence, and 5 = Very High Influence.

<sup>a</sup>Total does not equal 88 due to missing data.

Source: Factors Influencing Career Choices of Urban Agricultural Education Students, Esters and Bowen

Students, experiences. Of the former students who did not choose a career in agriculture,

events and experiences cited included having other career interests, a lack of interest in agriculture, and a lack of career opportunities.”

Table 2

*Events and Experiences Most Influencing Former Students to Choose or Not Choose a Career in Agriculture (n = 88)*

	Those Choosing <sup>a</sup>	Those Not Choosing <sup>b</sup>	Total
Event/Experience	f	f	%
Other career interest	--	19	23.5
Other	2	13	18.5
Personal factors	1	6	8.6
Lack of career opportunities	--	7	8.6
Lack of interest	--	7	8.6
High school educational experiences	4	1	6.2
Low salaries	--	5	6.2
Work experiences	3	1	4.9
Career opportunity	4	--	4.9
Enlisted in armed services	--	3	3.7
No interest in school	1	2	3.7
Lack of career information	--	2	2.5

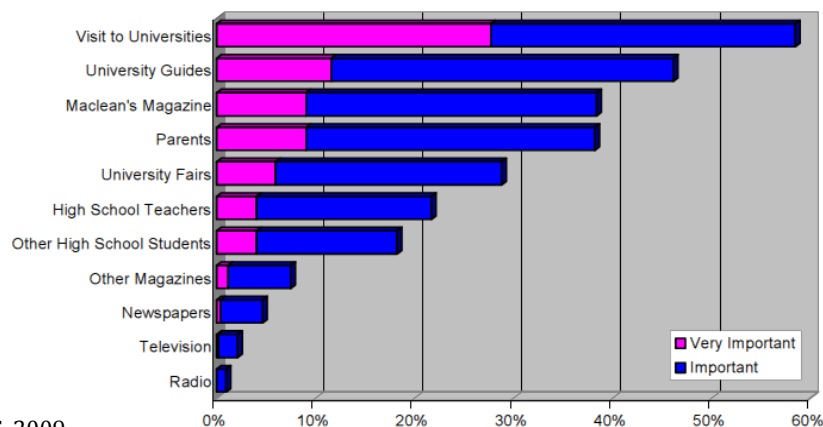
<sup>a</sup>One respondent did not provide an event or experience. <sup>b</sup>Six respondents did not provide an event or experience.

Source: Factors Influencing Career Choices of Urban Agricultural Education Students, Esters and Bowen

The authors noted that “these findings ... suggest that perhaps students are not adequately prepared to explore career opportunities in agriculture” and “furthermore, because former students in this study indicated other career interests, personal factors, and “other” events and experiences as the leading reasons why they did not choose careers in agriculture; perhaps administrators and agriculture teachers of urban agricultural education programs could ensure that they are providing a variety of learning experiences which may increase students’ interest in careers in the agricultural sciences.”

Similar influencers were documented in a study done by the OAC in 2009 which looked at why students in the College chose it over other colleges.

Figure 13. Percentage of OAC respondents indicating that selected influences were ‘important’ or ‘very important’ in their choice of university



Source: OAC, 2009

Another study which sought to identify obstacles to the successful recruitment of quality students into secondary agricultural education programs was done by James E. Dyer, Assistant Professor, University of Florida and Lisa M. Breja, Director of Graduate Student Services, Iowa State University. The objective of the study was to identify the major problems facing high school agriculture teachers in recruiting students for secondary agricultural education programs, as identified by agriculture teachers. The table below shows the results when teachers were asked to agree or disagree with certain known recruitment issues.

Table 3.

*Delphi Study Round Two: Level of Agreement with Ranked Categories of Recruitment Problems (n = 18)*

Problem Category	<i>M</i>	<i>SD</i>	Level of Agreement <sup>a</sup>
Competition from other programs	3.94	.87	Agree
Time to recruit	3.83	1.10	Agree
Guidance counselor support	3.78	1.22	Agree
Scheduling difficulties	3.78	1.22	Agree
Students active in other programs, activities, etc.	3.61	1.04	Agree
Image of agriculture	3.61	1.09	Agree
Access to potential students	3.56	.98	Agree
Administrative support	3.50	1.15	Agree
Graduation requirements - not enough time for agriculture courses	3.28	1.32	Uncertain
Parental support	3.00	1.28	Uncertain
Quality of students in the program	2.94	1.35	Uncertain
No interest in agriculture	2.94	1.39	Uncertain
School policies	2.89	1.08	Uncertain
Image of the agriculture program	2.89	1.13	Uncertain
SAE participation	2.78	1.17	Uncertain
Teacher commitment to recruiting	2.78	1.26	Uncertain
Salaries in agriculture	2.78	.88	Uncertain
Block scheduling	2.71	1.31	Uncertain
Community support	2.47	1.07	Disagree
History of the agriculture program	2.44	1.29	Disagree

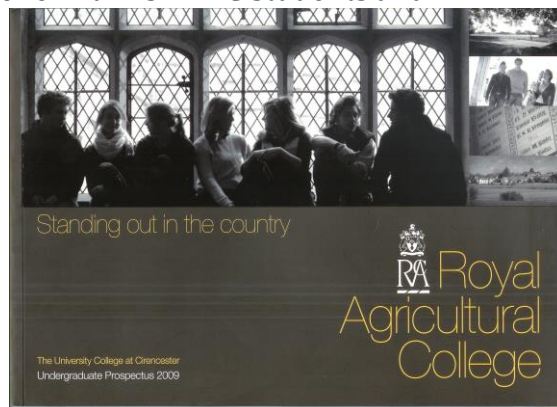
Source: Dyer and Breha, 2003. Problems in Recruiting Students into Agricultural Education Programs

While the teachers noted more issues relating to internal in-school difficulties, well-beyond the ability of those in agriculture to correct, many of the stereotypes shown in previous studies were listed. Obviously agriculture has an image problem.

## Chapter Four: IMAGE PROBLEMS

Agriculture has an image problem and universities and colleges must understand how potential students view the industry. At the Royal Agricultural College (RAC) in Cirencester, England, I was introduced to a recently done study on just this subject. RAC had a goal of significantly increasing student numbers within 5 years but understood they needed to have a better handle of how kids viewed them – and why or why didn't students choose to attend there.

Over the process of a year, phone interviews were done with 254 RAC students and career advisors as well as students attending competitor institutions and prospective students. Questions were asked about their perception of RAC, its strengths and weaknesses as compared to competitors, the RAC brand, how students shortlisted institutions and what actions RAC could take to help students choose them.



The results showed:

### Positives

- Reputation
- Location
- Alumni
- Employability

### Negatives

- Perceived as posh and elite
- Perceived lack of social life, competitive sports teams and leisure opportunities
- Small size
- Lack of courses offered
- Lack of awareness of existence of College – i.e. 30% of students at competing universities had not heard of RAC. Career advisors at grammar schools, even those located nearby, knew of RAC but 30% had insufficient knowledge of its programs and opportunities.

Undergrads were shown to be most influenced by the campus atmosphere, the available social activities, the prospectus, open-campus days and recommendations from friends and family, not unlike the studies previously highlighted.

After obtaining these results, RAC set a plan in motion to address the stereotypes and build on the positives. A new communications and awareness campaign was implemented which:

- Increased RAC's attendance at premier career conventions as well as farm shows
- Built profile further away from the campus - in Wales, Scotland, Northern and Eastern England

- Utilized student marketers
- Increased potential student visits to campus
- Offered short “Taster Day” courses to potential students to show them what a day at RAC would be like
- Improved relationships and communications with high schools and career advisors
- Developed updated marketing materials with focus on employability including a website as well as personalized and relevant direct mail
- Increased advertising budget

And the results of this campaign:

- 10% immediate increase in student numbers (a trend which still continues)
- Opportunities to offer Top-Up and industry training courses
- RAC’s participation in the AimHigher program which brings students from underprivileged backgrounds into the country to learn about agriculture

RAC is now ranked 8<sup>th</sup> out of 154 universities and colleges for graduate employability in the UK, at 96.4%.

## **Chapter Five: KEY LEARNINGS**

After visits to 15 colleges and universities in six countries, the key learnings can be divided into six categories.

1. Use the Buzz Words
2. Market to Different Audiences
3. Bring People to Campus
4. Mine Available Databases
5. Look at Other Sectors
6. Build on What is Already Happening



## Chapter Six: IT'S ALL ABOUT MARKETING

It became clear that agriculture speaks a language few people outside of the sector understand, or even want to understand. A word like 'soil', does not hold as much relevance or interest to youth as 'earth' does. Therefore a degree such as soil science isn't at all attractive.

Institutions should look at the title of their programs and work to incorporate "buzz words" into at least course descriptions, if not actual names. Across Canada, traditional agricultural science programs have been replaced with "new degrees or majors in agroecology (UofM, UBC) or environmental biology and resource conservation (McGill). The University of British Columbia (UBC) removed the word agriculture from its name and instead became the College of Land and Food Systems. The University of California at Davis (UC Davis) changed their course entitled 'Hydrology' to the 'World of Water' and saw double digit increases in enrolment.



Other schools are looking to rebrand their image to show that there is more to their courses than barns and farm animals. Pennsylvania State has adopted a slogan "Think Outside the Barn" which immediately brings forth the idea of careers outside of production.

Campuses also need to live 'buzz words'. They need to showcase that they are green, are technologically advanced, use local foods, are socially-aware and so much more. One way to do this is to develop innovative classes.

At California Polytechnic State University (Cal Poly) in San Luis Obispo in California, a chocolate making program now makes over \$30,000 a year for the school – and enrolment is full. Cal Poly Chocolates, launched in 2000 is a full chocolate making business – teaching everything from production to packaging and distribution. Since opening, the program has added two more courses, "Theories of Chocolate Making" and "The Science and History behind Chocolate". The program is unable to grow anymore until they get an infusion of capital funds for expansion.

The University also has a strong wine-making program, designed in a similar – from grape to glass – format.





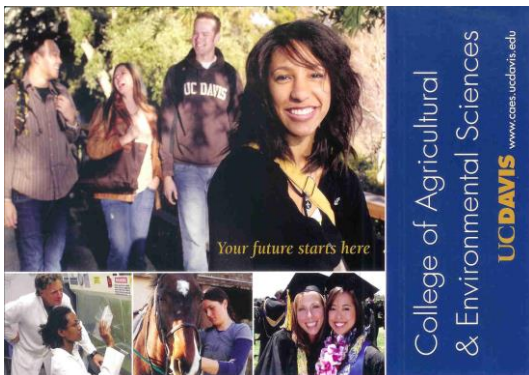
In response to a lack of agricultural teachers in the State of California, UC Davis now offers an agriculture and environmental education program. Students graduate with both a Science and a Teaching degree but the program is taught and geared for those interested in teaching in non-formal settings such as nature camps and environmental preserves.

## **Chapter Seven: THINK LIKE OUR AUDIENCE**

It can't really be said that a recruitment person in an office, or a professor, a parent or even a career counselor knows exactly what kids are thinking on any given day. They are not teens, and therefore must look for trends or ways to relate to youth.

People find it easiest to relate to people who are like them and recruiters must keep that in mind. In conversations at UC Davis about their Aggie Ambassador program, it was made clear that demographics are watched closely so that potential students can relate to the ambassador. Students find it easier to visualize themselves in a specific program, when they receive information from someone who looks and thinks like them.

This technique should also be used in developing marketing materials. Materials directed towards parents should not be the same as those for students. At Harper Adams University in England messages were developed for parents, students and even friends of students with different messages. Parents were shown information about job opportunities, quality of teaching, campus safety, costs and scholarships. Potential students were told about types of courses offered, facilities, student life and on a lesser note - job opportunities. It was noted that in many cases when a student decided on an agricultural program, they then needed 'talking points' to justify their choices to their peers, since again, 'agriculture was not necessarily a cool or popular choice. (personal conversation)'



It is well known that few first-year students really understand exactly what they want to study, so the more flexible agricultural colleges and universities can be in their course offerings, the more attractive they'll be. UC Davis is one of several institutions which now offer a first-year program which incorporates both arts and sciences. Their Arts-Science Fusion program has over 2000 students, all of whom get some exposure to agriculture. Students can then get a feeling for what type of courses they are most

interested in, and can look at different program options for their second year.

Recruiters must work hard to find out what types of things kids are interested in, and then suggest complementary programs in agriculture. For instance, if a potential student is interested in chemistry, why not talk to them about opportunities in Food Science? They can not only take all of the chemistry courses and work in a laboratory setting, but they will graduate with an applied degree and most likely multiple job offers. Compare

this to the same kid graduating with a generic chemistry degree and fighting for the same jobs as every other chemistry major across the country. Fresno State recruiters are especially talented in this as they are required to take courses in linking personality types to careers. Fresno State also builds recruitment into faculty tenure decisions so that everyone is required to take part in the future growth of their programs.

Institutions must always realize that students today are very socially aware and are looking for a place which not only just supports that, but also provides opportunities to engage in the broader world. Fresno State has set a goal that their students, faculty and staff should do one million volunteer hours annually.

### **Aggie Ambassadors**

One very popular and successful recruitment program is that of the “Aggie Ambassador”. Most agricultural programs in the US have dozens of in-course students who work as recruitment officers, speaking to classrooms, attending industry events and trade shows, exhibiting at career fairs, conducting campus tours and much more. In some cases these students get course credits, but only a few actually get paid. At UC Davis, between 70-100 ambassadors travel close to 50,000 miles a year to meet more than 140,000 potential students. Sixty kids work 30 hours over two terms at Fresno State for an elective credit.

Ambassadors are selected through an application and an interview process and top students are eligible to attend both State and National Aggie Ambassador Conferences where they can network with students from other universities, as well as potential employers.

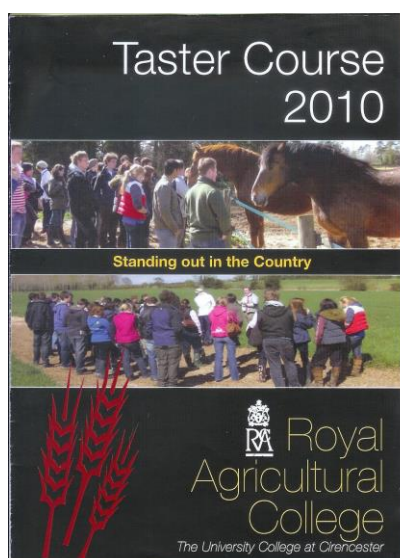


**National Agricultural Ambassadors Conference**  
UNIVERSITY OF CALIFORNIA, DAVIS - JANUARY 2010

The Aggie Ambassador network has been slower to start in Canada, but is beginning. The University of Manitoba (U of M) has a solid program, and a budget to provide a small salary to each of their ambassadors.

## **Chapter Eight: BRING PEOPLE TO CAMPUS**

All of the colleges and universities I visited stated that the best use of their recruitment time, and the best way for potential students to really learn about a possible school, is to bring those students on to campuses.



Once students are on campus, they can then meet professors, feel the atmosphere, explore laboratory and classrooms, visit residences, meet fellow students – and so much more that cannot be experienced on-line or through a brochure.

Different institutions get kids to visit through different techniques. RAC has “Taster Courses” –two day residential short courses aimed at 16 – 19 year olds. To quote from the course marketing materials, “You will gain insight into the

food and land-based industries and the diverse careers available, plus experience student life first-hand - from staying in halls to meeting new people. It will also provide you with the opportunity to learn more about the College and the courses that we have to offer. Current students, lecturers and industry professionals will be on hand over the two days to answer all of your questions.”

Many higher education facilities work with high schools to offer annual teacher conferences on professional development days in order to begin to develop a relationship with key teachers – who are a key influence on their students. Every recruitment officer spoken to during Nuffield travels reiterated this fact, noting that they usually can directly trace enrolments back to specific highly-engaged teachers year-over-year. Once a teacher has a good experience with a university or a program, and in terms of agriculture, can begin to see the opportunities for their students, they do not hesitate to recommend agriculture.

A relatively new program in Ontario is introducing agriculture into a select number of high schools across both rural and urban environments. Known as the ‘Specialist High Skills Majors’ these students will be predisposed to the agricultural and rural sectors and should be high on the recruitment list for OAC. If OAC can develop relationships with these students, the potential is massive. In Ontario there are only 1.8 million rural kids but over 10.3 million urban kids and the College needs to start looking at ways to reach those non-traditional students.



The University of Saskatchewan has a brilliant “Experience Science in Agriculture and Bioresources” program. Through its teacher training component and direct student engagement, training assistance, science teachers are helped to develop confidence in bringing forth agricultural and science-related concepts in the classroom. Once teachers are trained, these same concepts are transferred to students in the classroom or lab setting where they have the opportunity to understand the science behind certain experiments and get hands-on exposure to modern laboratory equipment and processes. Ultimately it is hoped that the program will raise the profile of agriculture; showcase the industry as an exciting field in which to build rewarding careers; attract new students to the College and help students and parents better understand careers in today's agricultural sector. And it's working. In the first three years, over 2500 students in 100 schools were exposed to agriculture as part of their grade 11 and 12 biology curriculum – and more recently the program is expanding to other western provinces.



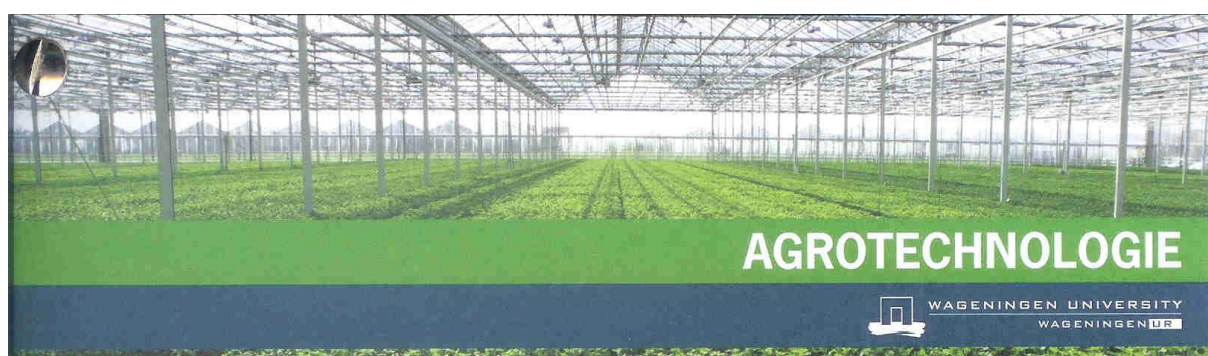
Once again though, in reference to the previous section, bringing students on campus means matching them with similar students. Recruitment staff should ensure that the tour guides are fluent in the language spoken by the potential students, are enthusiastic, knowledgeable and age appropriate. While potential students (and parents) love meeting key researchers and/or executives, they will have many more questions of and gain better insight from an actual student.



Institutions should also look at any campus event, whether or not it relates directly to agriculture, as an opportunity to recruit. During a farm conference at OAC, farmers were requested to bring along their teenagers for a separate 'fun' day. Not only did the kids have fun, but they also got softly introduced to the various agricultural programs available. Similarly during any youth events, agricultural recruiters should look to incorporate the 'cool' messages about their programs into events. An example used often at OAC is to take students through the Controlled Environment Facility, otherwise known as "The Space Lab". It's very much part of the agricultural department, but the research is looking at how to grow food for a Mars Mission. It's agriculture. It's cool and it opens up the range of career possibilities for many potential students.

There is also a great wealth of information in various databases. Recruiters should look at any and all trends and find ways to encourage the ones which relate to increased enrolment. The ability to do this differs from country to country, and even between provinces in Canada due to privacy legislation, but there can be simple ways to track potential students. Often a popular teacher, an active 4-H or agricultural youth club will be responsible for increased enrolments from a specific geographical region. For example, a popular high school teacher who promotes agriculture may positively influence the number of students going into agriculture from his/her high school. Seek out those people and/or organizations.

At Wageningen University in the Netherlands, and Fresno State, their communications and recruitment people were tasked to do a weekly visit with each department. This extra work paid dividends in terms of recruitment. When potential students arrived for campus tours, staff immediately knew what was happening in each department and could develop tour agendas so that they were always showing new, cool, environmentally-beneficial and high tech activities.



## **Chapter Nine: LOOK AT OTHER SECTORS/REGIONS**

Increased job opportunities and decreased student enrolment is not unique to agriculture, but rather is a trend being seen in all primary industries, including mining, fishing and forestry.

Recruiters should look to these other industries for new and creative ways to engage potential students.

One fascinating organization in Montana called “Provider Pals” ([www.providerpals.com](http://www.providerpals.com)) runs a program similar to on-line dating, yet rather matches classrooms with a primary provider – someone in the forestry, mining or farming sectors. The students and provider develop a relationship, both on-line, and in person throughout the year, giving students an insiders’ view of a specific industry. They see the farmer making difficult decisions, budgeting expenses, caring for the crops and livestock, interacting with other farmers and agri-businesses, and in doing so learn so much, but are also exposed to opportunities in the industry. In 2010, Provider Pals was working with 10,000 kids in 35 cities across the US.

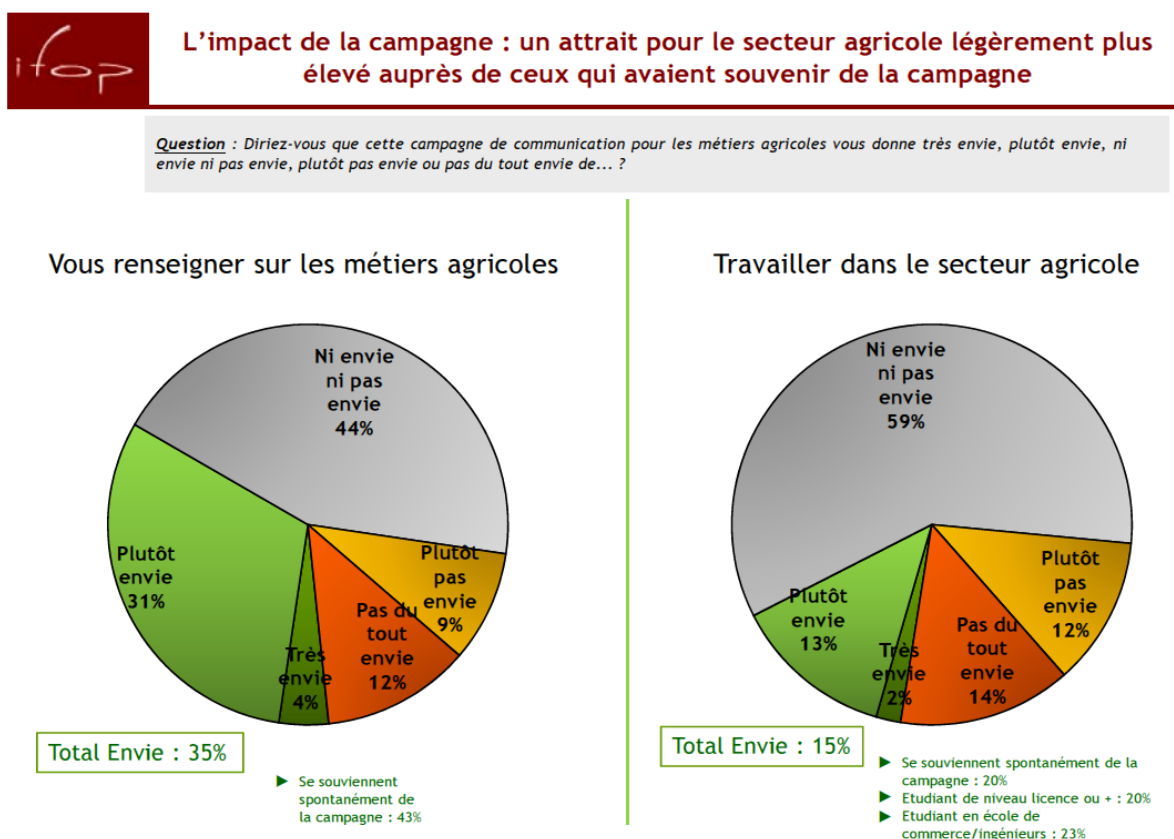
There is no need to recreate anything – just to think creatively and beyond our usual boundaries. Creative campaigns showcasing careers and opportunities in agriculture exist in many countries. One from France was exceptionally well done. “L’Agriculture, Des Métiers à la mode” was a campaign created by the French National Farm Association, La Fédération nationale des syndicats d'exploitants agricoles (FNSEA) in 2009. The design included agricultural images interposed with modern life references. The campaign included print and radio advertisements, billboards and on-line tactics over a period of several months, after which it was evaluated for recall. Over 800 people, from 15-25 years old, and being representative of the French population, were polled.





Results, shown below, indicated that a far greater number of people (35 %) were interested in at least learning more about careers in agriculture following the campaign than beforehand (15%). There were also significantly fewer (44% as opposed to 59%) respondents who didn't have an opinion, or care either way about career opportunities.

Figure 14.



Source: FNSEA, 2009

## **Chapter Ten: WORKING TOGETHER**

While travelling across Canada, it became evident very quickly that each university and college visited was fighting the same battle. Their communications and recruitment officers were working extremely hard to find ways to increase enrolment, attract non-traditional students into agriculture and convert in-course students to agricultural based programs - and they were all doing it with little or no budget. In fact, unbeknownst to each other, they were all putting in similar grant requests to the same companies, such as Farm Credit Canada and Monsanto. In reality, they were fighting against each other.

This doesn't make sense. It seems to be obvious that the issue was more about the lack of knowledge about the agricultural industry and the many opportunities, and less about where students actually studied. Once a student is exposed to career options in agriculture, they then use other factors to decide what institution best meets their needs.

It was also surprising that very few of the people in recruitment and communications position had never met or interacted with each other. With this in mind, and as a direct result of this Nuffield Study, funding was solicited from each institution to send these staff members to a two-day meeting at the OAC. The following is a summary of that meeting.

### **Convening the Working Group**

#### **Backgrounder sent to each University**

This initiative has come about as a result of an OAC Alumnus, Karen Daynard, who in conjunction with a Nuffield International Farming Scholarship has spent the last two years researching recruitment and communications strategies at various agricultural colleges and universities around the world.

One of her conclusions is the majority of institutions offering agricultural or food related programming are facing some degree of decline in student numbers, and the main reason for the lower numbers is a lack of awareness of the opportunities available in the agriculture, rural and food sectors. Youth still perceive a degree in agriculture to be associated only with a career in farming which in their mind is hard work, long hours and little money. They do not see the vast majority of job options, including marketing, finance, sales, technology, government, genetics and nutrition to name just a few.

With this in mind, the challenge becomes more about increasing awareness of the vast array of careers available to our graduates, and less about each individual institution showcasing their program options. In conversations with people at different institutions, as well as many other people concerned about the widening gap between numbers of graduates and number of jobs, Karen has realized that not only are there dozens of communications and recruitment campaigns being planned and implemented, but that many of the campaigns are looking at the same funding sources. Therefore in one way, we're all competing against each other when realistically we should be joining forces.

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### **The Working Group Meeting**

November 8-9, 2010

Hosted by Ontario Agricultural College,

With the support of Dr. Rob Gordon, invitations were sent out to all of the Faculties of Agriculture in Canada as well as Lakelands and Olds College. Deans were asked to send at least one of their staff members involved in communications and recruitment to come to Guelph for this initial meeting. The goal of the initial meeting was to share ideas, compare campaigns and hopefully develop a long-term working relationship. The two days were to be a combination of presentations, brainstorming, tours, social/networking time, and was to conclude with a visit to the Royal Agricultural Winter Fair in Toronto where several of the institutions had recruitment displays.

### **The Agenda**

#### **Monday November 8<sup>th</sup>, 2010 – OAC Boardroom, Johnston Hall, University of Guelph**

8:30 am	Greetings and Introductions
9:00 am	Presentations by various institutions on communications and recruitment campaigns
12:00 pm	Lunch (sponsored by OAC)
1:00 pm	Jon Treloar, U of S Bioresource Management Course Crystal MacKay, Ontario Farm Animal Council Colleen Smith, Ontario AgriFood Education Joanne Emeneau, Manager Academic Programs, College of Management Economics, University of Guelph Karen Daynard, Learnings from Nuffield Scholarship Travels
2:00 pm	Brainstorming Session – with other interested parties in Ontario
4:30 pm	Wrap-up and optional tour of the Bio Products Research Centre
7:00 pm	Dinner and social/networking time at the Borealis Grill Restaurant (Sponsored by Syngenta Crop Protection)

#### **Tuesday November 9<sup>th</sup>, 2010 – OAC Boardroom**

9:00 am	Gather at OAC. South doors of Johnston Hall
9:15 am	Tour of Controlled Environment Facility (Space Lab)
10:30 am	Meeting with Dean Rob Gordon – Science Atrium
11:15 am	Tour of innovative research being done in Food Science
12:15 pm	Catch bus to Toronto out front of the University Student's Centre.
12:30	Bus leaves for Toronto
1:45 pm	Royal Agricultural Winter Fair (tour)
3:00 pm	Wrap-up

#### **The attendees were:**

##### **University of Guelph/Ontario Agricultural College**

Jason Tran – Liaison Officer

Dr. Jonathon Schmidt – Associate Dean, Academic

Dr. Rene Van Acker – Associate Dean, External Relations

Karen Daynard - 2010 Canadian Nuffield Scholar

##### **Nova Scotia Agricultural College**

Brian Crouse – Manager, Student Recruitment and Awards & Scholarships Enrolment

Ashley Shepard – Student Recruitment Coordinator



**Macdonald Campus of McGill University/ Faculty of Agricultural and Environmental Sciences**

Silvana Pellicchia – Manager, Student Affairs Office

**Université Laval/Faculté des sciences de l'agriculture et de l'alimentation**

Ms. Jocelyne Boivin – Recruitment & Information activities

Dr. Pierre Charest – Vice-Dean of Studies

**University of Manitoba/Faculty of Agricultural and Food Sciences**

Sue Clayton – Community Liaison Coordinator

**University of Saskatchewan/College of Agriculture and Bioresources**

Jon Treloar – Manager, Marketing and Community Liaison

**University of Alberta/Faculty of Agriculture, Life and Environmental Sciences**

Melody Brooks – Recruitment and Student Liaison Officer

**Olds College/School of Agriculture**

Dalin Bullock – Chair

Jeff Suderman – Director of Student Recruitment

**University of British Columbia/Faculty of Land and Food Systems**

Winnie Pang – Recruitment and Advising Officer

**Afternoon invitees:**

Crystal MacKay, Executive Director, Ontario Farm Animal Council/AgCare

Colleen Smith, Executive Director, Ontario AgriFood Education

Andrew Moore, Marketing and Events Coordinator, 4-H Ontario

Darrell Hickman, the Chair of Agriculture at the School of Agricultural and Environmental Sciences, at Lakeland College in Vermilion, Alberta was also invited but unable to attend. Lakeland College does wish to be involved with this group as it moves forward.

**Summary of Faculty Presentations**

Prior to the meeting, each attendee was asked to prepare a short presentation which addressed current student numbers, enrolment trends, and recruitment strategies including demographics of targeted students. A summary of those presentations, moving from east to west across the country is attached in the appendix.

**On Moving Forward:**

The group identified several issues that they had in common. These included:

- Emotional attachment to the word “Agriculture”. Some colleges have removed it while others are using it less and less in their marketing. How do we be successful in recruiting kids without changing the names of colleges and/or courses? Is this a negative or is it just reflective of the audience? We need to gain student’s interest in a program and sometimes the word agriculture causes them to dismiss the faculty immediately.

- The 'traditional' target audience of rural kids and 4-H members is decreasing. How do we keep these predisposed kids interested in our programs? Part of the problem is their parents may not be supporting their studies in agriculture due to hardships on the farm.
- What role should governments play in the recruitment process?
- What role should industry play in the recruitment process? What are the dangers of corporate sponsorship?
- Parents are the biggest influencers on their kids' career/study choices. Few parents are aware of the opportunities in agriculture and related sciences. How do we communicate with parents?
- Do we need to worry more about retention and the overall success of our students vs. attracting new ones?
- What themes/images/messages resonate best with urban kids?
- How do we develop consistent messaging and educational campaigns for delivery to urban students? The vast majority of our graduates will not be farmers, so displays such as Farmz on Wheelz (from the Ontario Farm Animal Council) or Seed Survivor teach kids about farming, but not about career opportunities in agriculture.
- Topics relating to food are 'hot' right now - food safety, food security, food system, healthy food.
- How do we involve current students and recent alumni in discussions on recruitment?
- Are there opportunities at career fairs to group like-minded programs together to create more of a 'career area', as opposed to just being assigned a generic spot on the floor plan with all of the other universities?
- How big do we want to be in each of our programs? How many students can we manage well?

The group identified several key areas where it was felt that joint efforts may work to bolster recruitment in agriculture programs.

1. Partner with other farm and rural organizations to support their messaging and communications campaigns about the importance and the complexity of the agricultural and food industry and the numerous careers available. When groups such as the Ontario Farm Animal Council or provincial agricultural awareness organizations visit schools or attend events promoting agriculture, the universities could develop complementary information for distribution focusing on the careers available. This would take the base agriculture and food messaging to the next level.
2. Develop a stronger presence at career fairs or similar events by grouping like-minded programs and faculties together to promote careers in the industry as a whole. Currently at career fairs, faculties are allocated a 'spot'. With additional resources, there may be an opportunity to develop a larger display that promotes careers in the industry. The

message would be about careers in the industry as a whole, as opposed to promoting the specific university. A larger, grouped display area would attract more attention.

3. Work to support traditional sources of new students such as 4-H. Look for additional opportunities to allow 4-H or rural youth to explore multiple campuses rather than those just in their area.
4. Develop joint, certified agricultural and career based content which meets school curriculum across Canada. Currently there is a problem where too many organizations, companies and other entities are developing curriculum materials for teachers. When teachers aren't from an agricultural background, they cannot decide which materials are relevant, often leaving them to go with "what they know" which may or may not be positive messages about the industry. There are too many resources being thrown at them. There should be some standard or certifying body that curriculum materials need to pass through before they reach teachers. This working group could seize the opportunity to develop that standard or that body.
5. Develop a complete understanding of what the labour market needs now and in the future, so recruitment staff understand where the future jobs will be. This should be done in collaboration with employers and could be done at a national level.
6. There is a desire by the industry for a national recruitment campaign. Currently some companies are sponsoring recruitment efforts at specific faculties. The issue, however, is that all of the faculties are starting to compete against each other for the same funds. For example, Monsanto has put money into recruitment campaigns at U of S, U of M and OAC. Rather than supporting multiple projects (and having to choose which ones to support), they are interested in doing something on a larger, and national scale. Syngenta quickly put up funds to support the initial meeting of this working group and one of their marketing managers joined the group at dinner for further discussion on how the group might move forward.

### **Next Steps**

All of the attendees felt that the initial Recruitment Working Group meeting was a worthwhile event. This first gathering was more about meeting each other, gaining an understanding of the similarities and differences between faculties, and sharing thoughts on challenges and opportunities. There wasn't time in the initial two days to develop a concrete understanding of what this group could do together, or to brainstorm potential national strategies, but all attendees are committed to continuing the process.

The group recognized that since the need is for the industry to have a constant supply of highly skilled talent entering into the workforce each year, they should be approached to supply funding for some type of national program.

Jon Treloar (U of S) offered to take some initial steps in coordinating an effort amongst universities on how to approach industry for funding. It was thought that perhaps industry could be approached to cover the costs associated with these meetings as a start. Initially the working group should come together twice a year to identify a national recruitment strategy. In subsequent years, the group would implement and evaluate that strategy. U of S and U of M both volunteered to host future meetings. Moving the meetings to the various different campuses allows the attendees to see unique aspects of each institution.

Here are some individual comments from participants:

“First of all, I wish to thank you for having given us the opportunity to attend the Recruitment working group this Monday at Guelph University. Ms. Jocelyne Boivin and I have found the presentation given by our colleagues from other institutions and the discussion and brainstorming interaction very helpful and inspiring either for us personally as well as for our corporative objectives in recruitment. We sincerely hope that such activity will be done again in the future and you may fully count on our collaboration.”

*Pierre M. Charest, Laval*

“I really enjoyed meeting everyone, and I wanted to thank you for all the work you put into organizing this meeting. Hopefully we’ll all be able to meet again and find some ways to help each other out.”

*Winnie Pang, UBC*

“Thanks for organizing this gathering- I really appreciated the opportunity to participate and hope the group continues to meet in the future as well!”

*Melody Brooks, U of A*

“I wanted to say thank you for gathering all of the Ag universities together to discuss various recruitment tactics. It was so interesting to listen to the other institutions presentations.”

*Ashley Shepard, NSAC*

All and all, the recruitment group felt it was excellent to meet with each other, and we all support a national endeavour. It will just take creativity, time and money to develop such a plan. The need and enthusiasm already exists.

## **CONCLUSION**

What can industry do to assist in increasing enrolments?

The following are suggestions that the industry may wish to consider. It is recognized that some of these things are already being done.

Industry should work with other sectors in food and agriculture to better the image of our chosen field, especially with urbanites and potential students. We have an excellent case to sell; we now have the most secure supply of safe and nutritious food available in the history of humankind. This food is available for the smallest proportion of our disposable income in history. And we produce it in a sustainable method, with a great deal of focus put on preserving the natural environment.

It is also important for us to influence Canadian government policy. Agriculture needs to be one of the pillars of Canada's science and innovation policy, and we are the only ones who can ensure its presence. Again this is an industry-wide issue that is best done by coordinated effort.

We must provide information on career opportunities, in methods which are attractive and accessible to students. An obvious vehicle is social media, including Twitter, Facebook and Instagram; however, students still rely on written materials in guidance counselors' offices. Materials should reach students of all ages to ensure they choose courses at high school which can open up opportunities at university. Potential students should also be informed about career opportunities so that they can properly select electives, which are appropriate to industry needs.

Industry can play a more active role in assisting with recruitment of students. We should be asking our local agricultural institutions as to how we, as alumni and industry, can help recruit students. Remember, people do tend to relate best to people similar to themselves, so we should be sending our brightest and most enthusiastic young members out to talk to high school students about opportunities. If we're not in that "young, student-like" demographic, industry should look to support any and all recruitment campaigns and efforts financially or through events such as career days.

Success means thinking differently, and thinking opportunistically.

## REFERENCES

AgCareers.com. Job Report 2010. <http://www.agcareers.com/info.cfm?task=mresearch0>

Camp, W.G. (1998). *Supply and demand for teachers of agricultural education in America*, Paper presented at the Annual Meeting of the Agricultural Education Division of the American Vocational Association, New Orleans, LA.

Camp, W.G., Egan, G., Garton, B., Dyer, J., Flowers, J., Stewart, M., Williams, Scofield, G., & Foster, B. (1996). *Teacher Recruitment*, Workshop conducted at the American Association for Agricultural Education Meeting, Cincinnati, OH.

Dyer, J.E., Lacey, R., & Osborne, E.W. (1996). *Attitudes of University of Illinois College of Agriculture freshmen toward agriculture*, Journal of Agricultural Education, 37(3), 43-51.

Esters, L.T. & Bowen, B. (2005) *Influencing Career Choices of Urban Agricultural Education Students*, Journal of Agricultural Education 25 Volume 46, Number 2, 2005.

Dyer, E & Breja, L. M. (2003). *Problems in Recruiting Students into Agricultural Education Programs*, Iowa State University, Journal of Agricultural Education 81 Volume 44, Number 2, 2003.

Farm Credit Canada, Vision Research. (2008). Optimism in Canadian Agriculture. <http://www.fccvision.ca/Articles/Default.aspx>.

Fisher, T. A., & Griggs, M. B. (1995). *Factors that influence the career development of African-American and Latino youth*, The Journal of Vocational Education Research, 20(2), 57-74.

Goecker, A. D., Whatley, C. M., & Gilmore, J. L. (1999). *Employment opportunities for college graduates in the food & agricultural sciences*, United States, 2000-2005. United States Department of Agriculture and Purdue University

Goecker, A.D., Smith, P. G, Smith, E and Goetz, R. (2010). *Employment opportunities for college graduates in the U.S. food, agricultural, and natural resources system*, USDA, 2010-2015. (<http://www.ag.purdue.edu/USDA/employment/Pages/default.aspx>)

Harvey, B. (2007). *Seed related education in Canada for the Canadian Seed Trade Association* <http://cdnseed.org/wp-content/uploads/2011/08/BryanHarveyAgricultureEducation.pdf>.

Morrison, I. (2009). *Enrolment Trends in Canadian Faculties of Agriculture*. A study commissioned by the Canadian Faculties of Agriculture and Veterinary Medicine. Not available publicly.

USDA. (2005). *Employment opportunities for college graduates in the U.S. food, agricultural, and natural resources system*, USDA, 2005-2010

Zoldoske, D. F. (1996). *Motivational factors that influence high school juniors' and seniors' perceptions of agriculture as a career choice*, Unpublished doctoral dissertation, University of La Verne, La Verne.

