





Working with Your University

G. W. Mathison

Take Home Message

Canadian and American Universities are a very useful source of general and specific information for cattle feeders. University research is primarily designed to answer the 'how' and 'why' questions which, must be answered if major advancements in productivity, quality, and profitability are to occur. The University has a unique role to play in educating our children and in providing trained personnel for the cattle feeding industry. Cattlemen can work with the university by communicating problems they are facing, giving constructive criticism, cooperating in practical on-farm research, and in providing support.

What Can the University Do for You?

The University as a source of information

Universities in Canada have traditionally concentrated on teaching and research since provincial departments of agriculture have had primary responsibility for extension activities. This does not mean, however, that cattle feeders should not expect to obtain useful and practical information from the University. Because staff are responsible for teaching, generally they will have a sound background in applied aspects of cattle production. Also, Universities have publication, books, computer software, information on the Internet, etc. which will be useful to cattle feeders. Staff often speak at producer meetings and the university sponsors meetings and short courses. Some University courses may also be taken as 'distance education' without physically attending the institution. Thus, although the University is not as accessible as a local beef specialist and the personnel have other responsibilities, it is a good source of general information for cattlemen.

Universities should be considered as one of the primary sources of information for specific and less common problems. Remember that University staff are involved in leading-edge research which is intended to provide you with answers to both today's and tomorrow's questions. They have

access to the scientific journals where the latest research is published. Researchers also have a good network of other scientists who may have the answer to your problem. Finally, researchers attend national and international meetings where the latest research is presented and problems and theories are discussed.

The University as a place for research

Research is vital to the competitiveness of the cattle industry. Can you imagine how successful our industry would be in competing in the international marketplace if no Canadian research was conducted over the next 20 years? Universities have been, and will continue to be, one of the primary sites for Canadian beef research. Professors must have keen interest in research otherwise they will not survive in the competitive University system. In addition, the top students from around the world are selected for graduate training and their young and eager minds make a tremendous contribution to research in the beef cattle industry.

University researchers are not just involved in answering today's questions with applied research programs, they are examining the future as well. They are also engaged in basic research which is designed to answer the questions of why things are the way they are. It is only when we understand the 'why' questions and how things work that real advancements in productivity, quality, and profitability can occur. It is essential that such research be continued at Universities and similar institutions since on-farm research by its very nature is applied and will not result in the creation of major new technologies for the beef cattle industry.

The University as a source of production specialists and scientists

Universities have had and will continue to have a unique role in training of production specialists, extension agents, educators, and researchers. Such people are essential for the future of the cattle feeding industry.

The University as a place to educate our children

Young people who want to be involved in the cattle industry should seriously consider attending a University. Students normally spend four years in undergraduate programs studying the basic arts and sciences, current agricultural techniques, and information in newer disciplines such as molecular biology and computer modelling before obtaining a Bachelor of Science degree in Agriculture. After graduation some students choose to enter a graduate program where

they normally spend a little less than two years in obtaining and Masters (MSc) degree while learning more general information as well as researching a particular problem. A minimum of an additional three years of study and research is required to obtain a doctorate (PhD) degree.

What you can do for your University

It is important that you work closely with your local University personnel to obtain what you can from them but also so that you can make a contribution to your industry through the University. If you keep communication lines open you will encourage researchers to spend more time on problems which are of concern to you and your fellow producers. A side benefit is that University personnel will develop a better appreciation for your operation and may well design research projects or specific management and production techniques to address your particular concerns. Good communication is therefore mutually beneficial.

The importance of on-site research in terms of development of new feeding and management procedures and rapid adoption of new technologies and management techniques at the feedlot level cannot be overemphasized. More University research is now being done with cooperating livestock producers since this reduces the cost of research and the results may be more applicable to commercial operations. Also, the demonstration of results 'on farm' generally means that the information will be picked up more quickly by other producers. You can assist University personnel by providing your expertise and facilities for such research. In turn, because of their experience, University personnel can assist you in applying for research money, in deciding on which questions need to be researched for you particular operation, and in setting up and interpreting research projects.

Your individual support for the University is essential. Recognize the importance of its teaching, training, and research activities to you and for the advancement of your industry. Support it as much as you can politically, financially, and verbally. Public institutions need such support now more than ever.

Finally, if you feel that you cannot support the University the way it is because of real or perceived problems, then work to change it by offering constructive criticism. It is too important to you and your industry to simply ignore.

University Personnel

Personnel involved in beef research at Canadian Universities are listed below. Cattlemen should not limit themselves to Canadian institutions, however, since Universities in United States and other countries also have much to offer.

Table 1.	Staff involved in Be	ef Cattle Research at	Various Canadian Universities

McGill University - www.mcgill.ca

Department of Animal Science

McGill University, McDonald Campus, 21,111 Lakeshore Rd. Ste-Anne de-Bellevue, QC H9X 1C0

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Name	Phone	Email	Areas of Interest
Cue, Roger	398-7805	roger@animasci.agrenv.mcgill.ca	Genetics, modelling, calving
Phillip, LeRoy	398-7802	phillip@macdonald.mcgill.ca	Nutrition, forage, protein

Nova Scotia Agricultural College - www.nsac.ns.ca

Department of Animal Science

Nova Scotia Agricultural College, PO Box 550, Truro, NS B2N 5E3

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Anderson, Derek	893-6651	d.anderson@nsac.ns.ca	Department head
Firth, Nigel	893-6645	n.firth@nsac.ns.ca	Carcass quality
Fredeen, Alan	893-6649	alan.fredeen@nsac.ns.ca	Nutrition, grazing, minerals
Lirette, Andre	893-6646	a.lirette@nsac.ns.ca	Nutrition, opportunity feeds
MacLaren, Leslie	893-6643	l.maclaren@nsac.ns.ca	Reproduction, estrus synch
Tennessen, Tarjei	893-6652	t.tennessen@nsac.ns.ca	Behaviour, environment

University of Alberta - www.ualberta.ca

Department of Agricultural, Food and Nutritonal Sciences

410 Ag Forestry Building, University of Alberta, Edmonton, AB T6G 2P5

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Name	Phone	Email	Areas of Interest
Baracos, Vickie	492-7664	vickie.baracos@ualberta.ca	Protein metabolism
Basu, Tappan	492-4921	tbasu@afns.ualberta.ca	Nutrition
Bork, Ed	492-3843	edward.bork@ualberta.ca	Range Management
Christopherson, Bob	492-3388	bob.christopherson@ualberta.ca	Animal physiology
Clandinin, Tom	492-5188	tom.clandin@ualberta.ca	Nutrition
Dixon, Walter	492-3233	walter.dixon@ualberta.ca	Molecular biology
Field, Catherine	492-2597	catherine.field@ualberta.ca	Nutrition & Metabolism
Hudson, Bob	492-2111	robert.hudson@ualberta.ca	Wildlife prod/ management
Kennelly, John	492-2133	john.kennelly@ualberta.ca	Dairy cattle production
King, Jane	492-4750	jane.king@ualberta.ca	Physiology of forage crops
Leonard, Jerry	492-0107	jerry.leonard@ualberta.ca	Bioresource engineering
Makarechian, Mak	492-1316	mak.makarechian@ualberta.ca	Animal breeding & genetics
Mathison, Gary	492-7666	gary.mathison@ualberta.ca	Animal Nutrition
McCargar, Linda	492-9287	linda.mccargar@ualberta.ca	Clinical nutrition
McMullen,Lynn	492-6015	lynn.mcmullen@ualberta.ca	Food microbiology

Naeth, Anne Price, Mick Stiles, Michael Stringam, Gary Temelli, Feral Tewari, J.P. Department of Renew 751 General Services I Telephone: (403)492-4 Name McGill, Bill Department of RuralE	Building, Un 413 Fax: (40 Phone 492-5397	niversity of Alberta, Edmonton, AB 03)492-4323 Email	Conservation/reclamation Livestock product/bison Food microbiology Oilseed breeding Food quality Plant pathology T6G 2E3 Areas of Interest Soil Biochemistry	
•	•	of Alberta, Edmonton, AB T6G 2H	1	
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Name	Phone	Email	Areas of Interest	
Jeffrey, Scott Lerohl, Mel policy	492-5470 492-3222	scott.jeffrey@re.ulberta.ca mel.lerohl@ualberta.ca	Ag business management Production economics,	
Unterschultz, Jim Veeman, Michele	492-5439 492-0270	jim.unterschultz@ualberta.ca michele.veeman@ualberta.ca	Marketing Marketing, policy, trade	
208 - 2357 Main Mall,\ Telephone: (604)822-4 Name			Areas of Interest	
Rajamahendran, Raj Tait, Malcom Thompson, Jim	822-4784 822-3455 822-2794	raja@unixg.ubc.ca mtait@unixg.ubc.ca jrthomp@unixg.ubc.ca	Reproduction, embryos Nutrition, grazing, minerals Chair, biochemistry	
University of Guelph - www.uoguelph.ca Department of Animal and Poultry Science University of Guelph, Guelph, ON N1G 2W1 Telephone: (519)824-4120 Fax: (519)836-9873				
Name	Phone	Email	Areas of Interest	
Buchanan-Smith, Jock Schaeffer, Lawrence Swathland, Howard Wilton, James	424-3645	jbs@aps.uoguelph.ca lrs@aps.uoguelph.ca hswatland@aps.uoguelph.ca wilton@aps.uoguelph.ca	Nutrition Genetics, models Biochemistry, meats Genetics, selection	
Department of Biomedical Sciences University of Guelph, Guelph, ON N1G 2W1 Telephone: (519)824-4120 extension 4900 Fax: (519)767-1450				
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Basrur, Pari Betteridge, Keith	824-4926 824-8258	pbasrur@ovc.uoguelph.ca kbetter@uoguelph.ca	Biomedical sciences Biomedical sciences	

Coomber, Brenda Gentry, Patricia Harris, William King, Allan Department of Clinic University of Guelph,	Guelph, ON		Biomedical sciences Biomedical sciences Biomedical sciences Biomedical sciences		
Name	4 i 20 extens Phone	ion 4000 Fax: (519)767-0311 Email	Areas of Interest		
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Department of Microbiology University of Guelph, Guelph, ON N1G 2W1 Telephone: (519)424-4120 extension 3362 Fax: (519) 837-1802					
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Forsberg, Cecil	824-3433	cforsber@uoguelph.ca	Rumen microbiology		
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Deparment of Pathol University of Guelph, Telephone: (519)824-	Guelph, ON	N1G 2W1 ion 4999 Fax:(519) 767-0809			
Name	Phone	Email	Areas of Interest		
Hayes, Tony Jacobs, Robert Kaushik, Azad Percy, Dean Shewen, Patricia	824-4637 824-4667 824-4389 824-4656 424-4453	ahayes@ovc.uoguelph.ca rjacobs@ovc.uoguelph.ca akaushik@ovc.uoguelph.ca dpercy@ovc.uoguelph.ca pshewen@ovc.uoguelph.ca	Pathobiology Pathobiology Pathobiology Pathobiology Pathobiology		
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University Laval - www.ulaval.ca Département des sciences animales Pavillon Paul-Comtois, Université Laval Ste-Foy, QC G1K 7P4 Telphone: (418)656-3514 Fax: (418)656-3766					
Phone	Email	Areas of Interest			
		Estrus synchonization Nutrition, forages, intake			
University of Manitoba - www.umanitoba.ca Department of Animal Science, Winnpeg, MB R3T 2N2 Telephone: (204)474-6028 Fax: (204)275-0402					
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		Genetics, carcass data Nutrition, forages Physiology, stress			
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	Guelph, ON 4120 extens Phone 824-4006 824-4031 824-4035 824-4036 W.ulaval.ca ences animals, Université 514 Fax: (41 Phone 656-2252 656-2781 Da - www.ur al Science, W 6028 Fax: (2) Phone 474-9102 474-9139 474-9527 Dewan - ww utural Economewan, Sask 4008 Fax: (3) Phone al and Poult newan, Sask 128 Fax (30) Phone 966-4160 966-4152 966-4134 966-8755 966-4972 966-4137 966-5622 966-4153	Guelph, ON N1G 2W1 4120 extension 4742 Fax: (519)763-8621 Phone Email 824-4006 kbateman@ovc.uoguelph.ca 824-4031 wjohnson@ovc.uoguelph.ca 824-4036 klissemo@ovc.uoguelph.ca 824-			

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Haines, Deborah 966-7245 hainesd@herald.usask.ca Immunology, vaccines Wisra, Vikram 966-7218 misra@herald.usask.ca Virology, vaccines

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Naylor, J.M. 966-7098 jon.naylor@usask.ca Internal Medicine, calf scours

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Name Phone Email Areas of Interest

Griebel, Philip 966-7472 Immunology, biotechnology
Potter, Andy 966-7484 Bacteriology, biotechnology
van den Hurk, Sylvia 966-7487 Virology, biotechnology

Willson, Phil 966-7480 Bacteriology, biotechnology