

**Ontario Animal
Research and Services Committee
(O.A.R.S.C)**

**2003 Annual Report
to
Ontario Agricultural Services
Coordinating Committee**

November 2003

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(*last year's report to reflect current priorities)

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Ontario Animal Research and Services Committee (OARSC) Report 2003

Introduction

The focus of this year's OARSC and twelve subcommittee meetings was to build process and procedures for the next strategic Research Review due in 2004. It is this review that is most closely linked with the establishment of the 4-year plan of research for the Animal Research Program under the OMAF Agreement with the University of Guelph.

OARSC met for its annual meeting on October 29, 2003. Subcommittee chairs for aquaculture, beef, dairy, equine, fur, sheep, goats, pork and poultry each provided:

- a description of the current issues facing their industries that potentially affect research priorities;
- an update on the current status of research;
- new or updated research recommendations; and
- a description of the path each sub-committee will take towards the fall of 2004 when an important strategic research review is due.

Current Issues

The discovery of Bovine Spongiform Encephalopathy (BSE) in a single beef cow in Alberta on May 20th, 2003 is certainly the largest and most far-reaching issue of the year. All ruminants were affected by the closure of the US and other international borders to trade. Thus, there is increased sensitivity in many of the subcommittees surrounding the issue of Transmissible Spongiform Encephalopathies (TSE) and the potential impact on the perception of food safety, price, and related production and marketing impacts. By far the most common issue identified by subcommittees was a currently difficult and worsening position with regard to disposal of deadstock (identified by furbearing, beef, sheep, poultry and, to a lesser extent, dairy and swine).

Other issues that may affect future research priorities include:

- U.S. Country of Origin labeling (Cool)
- Agricultural Policy Framework
- Implementation of the Nutrient Management Act
- Ability to continue "off-label" use of livestock medicines
- Environmental concerns of odour, greenhouse gases, nutrients and pathogens especially from large commercial livestock operations
- Animal welfare, especially on large commercial livestock operations
- Food safety and quality
- Production competitiveness
- Traceability

None of these, however, were seen to be sufficiently specific or sufficiently urgent to result in significant new research recommendations. The subcommittee reports are

appended. Researchers are requested to use these, together with the Strategic Research Recommendations from the 2000 report, to support their requests for research support until the Strategic Report for 2004 is developed and published.

Research Status and Changing Priorities

The OARSC committee operates under a 4- year research cycle. Every four years a strategic research report is prepared to set research priorities for another four years. The last one was prepared in the year 2000. The intervening years have also had a theme or focus. The 2001 report focused on service delivery, 2002 focused on technology transfer and 2003 was planned for an emerging issues theme.

In practice each of the previous annual reports discussed emerging issues and provided supplementary research recommendations where warranted. This year's report continues that tradition. However, with 2004 being the next strategic research report year, 2003 emerged as a maintenance year. The Committee sees little sense in dramatically revising research priorities on an ad hoc basis so close to a pending strategic review. The decision was made to focus our energies on the future and build towards the strategic review next year.

Building to the Next Strategic Review

Each of the subcommittees of OARSC has prepared a strategy to guide them to the successful completion of next year's strategic research report. Most subcommittees are already well along in their processes. Here are some of the solid strategies discussed at the OARSC annual meeting:

- Add facilitated meeting(s) to review existing research and brainstorm issues;
- Provide written information (listings of research, industry trends and issues etc) well in advance of meetings (required reading)
- Consider industry SWOT analysis approach (strengths, weaknesses, opportunities and threats) in deciding research requirements
- Solicit feedback/discussion in a variety of ways e.g. using industry listservs, advertising process through industry newsletters, sponsor industry events
- Increase Federal knowledge/input (ICAR listings or through invitation of individuals from AAFC, CFIA etc).
- Review membership of subcommittees now; ensure the right folks are at the table for the work ahead. e.g. reviewing if key sectors are represented or selecting technology early-adopters as subcommittee resource-people
- Educate Subcommittee – e.g. existing research resource-base (facilities/expertise), availability of OMAF and other external funds
- Bring in guest speakers (focussed on specific issues or to help with 'blue sky' thinking or idea-generation thought-processes)
- Divide subcommittee into working groups to develop and wordsmith recommendations (goals and objectives)
- Either link with, or be aware of research in other/overlapping programs if necessary (OMAF-food, environment, crops, rural, Federal).

2004 promises to be an exciting year as all our hard work pays off in a thoughtful and comprehensive strategic research report and a new course for animal research in the Province of Ontario.

The full OARSC report can be viewed at
<http://www.gov.on.ca/OMAFRA/english/research/oasccindex.html>

Rick Norkooli
John Walton
Co-chairs
Ontario Animal Research Coordinating Committee
November 2003

General Statistics For The Ontario Livestock Industry

The tables that follow show:

1. Average Price to the Producer – Ontario
2. Farm Cash Receipts by Province
3. Farm Cash Receipts From Farming Operations In Ontario
4. Ontario and Canada Agri-Food Trade – January to December
5. Number of Livestock Slaughtered in Commercial Establishments
6. The Size of the Ontario Livestock and Poultry Industry
7. Per Capita Consumption of Selected Foods

Detailed information on the state of the industry for each species/commodity is included in each subcommittee report.

Table 1 – Average Price to the Producer, Ontario

	1992	1994	1995	1996	1997	1998	1999	2000	2001	2002
Slaughter steers, \$/cwt	85.65	94.24	80.64	75.88	80.93	81.08	90.92	101.2	109.2	101.55
Slaughter lambs, \$/cwt	97.99	116.60	130.62	138.22	142.9	133.6	127.4	130.2	129.4	113.64
Hogs, index 100, \$/100 kg	132.00	145.00	151.00	189.00	187.00	121.00	120.00	161.00	182.00	145.00
Chickens, \$/kg	1.51	1.44	1.41	1.61	1.6	1.57	1.44	1.50	1.62	1.5
Turkeys, \$/kg	1.60	1.66	1.67	1.85	1.81	1.78	1.71	1.72	1.75	1.76
Eggs, \$/doz	1.04	1.12	1.17	1.31	1.24	1.20	1.19	1.24	1.3	1.25
Milk, \$/hl	-	52.05	51.82	51.8	51.47	56.42	51.74	53.90	54.19	52.06

Source: Statistics Canada

Table 2 – Total Farm Cash Receipts by Province, (\$'000)

	1999	2000	2001	2002
Newfoundland	77,448	72,657	78,264	83,403
Prince Edward Island	347,012	320,689	336,275	366,371
Nova Scotia	395,229	413,927	422,781	408,899
New Brunswick	373,868	366,095	410,284	421,157
Quebec	5,149,647	5,436,028	5,727,108	5,493,054
Ontario	7,221,099	7,919,142	8,565,722	8,491,713
Manitoba	2,959,096	3,177,968	3,691,347	3,827,443
Saskatchewan	5,530,958	5,717,979	6,503,187	6,156,292
Alberta	6,488,906	7,527,603	8,339,857	8,284,916
British Columbia	1,937,540	2,074,488	2,248,607	2,241,551
Canada	30,480,801	33,026,576	36,323,432	35,774,799

Source: Statistics Canada, Catalogue No. 21-603

Table 3 – Farm Cash Receipts from Farming Operations, Ontario 1995 – 2002 (\$'000)

Item	1995	1996	1997	1998	1999	2000	2001	2002
Wheat	163,754	159,802	73,734	120,266	106,517	111,811	110,878	209,846
Oats	6,501	5,371	5,201	4,847	4,244	3,043	5,618	7,434
Barley	11,998	14,463	11,612	10,148	7,899	7,068	10,272	11,336
Rye	4,095	5,845	5,410	5,025	4,570	3,650	4,585	4,783
Canola	21,070	12,314	17,507	17,868	8,896	10,066	8,376	14,294
Soybeans	590,909	558,461	726,560	688,921	525,940	586,476	448,830	475,530
Corn	474,347	509,535	435,216	385,059	458,786	408,393	388,167	461,834
Potatoes	53,794	48,956	57,625	54,774	62,555	65,590	71,937	101,893
Vegetables	432,407	443,796	464,211	571,234	599,247	653,248	735,701	719,459
Apples	73,878	80,352	90,951	88,655	96,500	98,541	97,359	83,334
Other tree fruits	49,953	36,355	42,822	44,980	49,628	45,712	47,978	46,102
Strawberries	28,381	14,073	17,351	17,431	17,360	17,300	19,931	18,975
Other berries, grapes	37,775	39,458	46,114	51,569	58,985	53,703	60,458	55,059
Floriculture and nursery	445,287	469,508	505,264	577,397	664,640	811,333	842,310	925,270
Tobacco	270,402	323,630	331,873	342,307	338,960	346,771	245,697	257,913
Ginseng	47,300	51,612	39,897	36,851	22,921	24,856	37,599	39,978
Dry beans	63,723	36,057	28,640	31,399	41,942	29,631	22,383	54,968
Forage and grass seed	1,601	1,620	1,824	1,739	1,396	1,384	1,607	1,876
Hay and clover	21,520	25,407	30,314	27,478	25,315	26,744	28,900	30,261
Maple products	9,897	14,807	10,108	8,125	10,444	17,459	10,599	10,888
Forest products	19,718	20,787	20,977	19,849	21,563	19,655	19,347	19,244
Christmas trees	..	..	11,700	6,078	6,078	6,078	6,078	6,069
Miscellaneous crops	16,971	14,361	14,874	15,561	15,674	16,743	16,123	17,785
Total crops	2,845,281	2,886,570	2,989,785	3,127,561	3,150,060	3,365,255	3,240,733	3,574,761

Table 3 – Farm Cash Receipts from Farming Operations, Ontario 1995 – 2002 (\$'000)

Item	1995	1996	1997	1998	1999	2000	2001	2002
Cattle	760,398	781,670	781,861	850,900	907,070	979,652	1,126,588	1,058,747
Calves	86,300	71,115	87,462	80,104	87,721	89,626	99,540	86,925
Hogs	587,417	744,165	782,718	589,661	601,127	831,107	956,406	817,877
Sheep	1,983	1,870	2,190	2,590	2,391	3,069	2,821	2,275
Lambs	21,485	24,079	22,539	21,689	22,361	25,306	30,659	30,814
Dairy products	1,169,532	1,185,680	1,234,543	1,277,740	1,280,810	1,319,954	1,369,058	1,357,337
Hens and chickens	341,455	406,237	417,679	443,754	424,465	439,190	495,533	472,469
Turkeys	101,082	121,256	118,171	110,422	101,985	115,172	115,904	118,343
Hatcheries	..	..	12,459	14,212	10,564	10,530	10,860	10,890
Eggs	211,158	236,895	191,847	182,292	188,335	197,134	210,597	211,800
Wool	628	374	363	264	166	231	239	240
Honey	8,182	9,417	9,284	8,906	8,738	8,443	9,057	9,330
Furs	10,264	18,983	13,597	13,068	8,589	10,676	10,698	11,399
Miscellaneous livestock	72,991	72,379	73,873	72,280	73,295	81,012	89,172	84,188
Total livestock and products ^(Note A)	3,390,719	3,691,311	3,767,464	3,686,280	3,738,100	4,131,609	4,547,814	4,293,544
NISA	11,593	30,295	34,318	76,002	109,107	109,730	122,008	169,790
GRIP (revenue protection)	-199	563	-	-	-	-	-	-
Crop insurance	25,818	58,096	47,154	51,329	28,644	71,749	218,699	218,983
Provincial stabilization	-	-	-	-	-	-	-	-
Dairy subsidy	65,258	53,742	53,284	47,364	36,487	25,934	14,704	3,190
Market Revenue Program	-	-	-	15,070	74,844	127,243	121,853	100,977
Ontario Whole Farm Relief Program	-	-	-	-	78,885	87,343	52,900	63
	-	-	-	-	-	-	56,336	57,557
Other payments	8,210	1,122	1,860	11,279	5,972	831	190,675	72,848
Total payments	111,407	143,832	136,587	201,041	333,331	422,278	777,175	623,408
Total receipts	6,347,407	6,721,713	6,893,836	7,014,882	7,221,099	7,919,142	8,565,722	8,491,713

A - Includes receipts from the sale of horses and embryos, which are not explicitly listed in the table.

Source: Statistics Canada, Catalogue No. 21-603

Next update: August 2003

Table 3 – Farm Cash Receipts from Farming Operations, Ontario 1995– 2002(\$'000)

Income of Farm Operators from Farming Operations, 1995-2002(\$'000)

Item	1995	1996	1997	1998	1999	2000	2001	2002
+ Total farm cash receipts	6,347,407	6,721,713	6,893,836	7,014,882	7,221,099	7,919,142	8,565,722	8,491,713
- Operating expenses after rebates	5,186,576	5,447,192	5,583,631	5,752,547	5,927,135	6,331,177	6,826,718	7,097,171
= Net cash income	1,160,831	1,274,521	1,310,205	1,262,335	1,293,964	1,587,965	1,739,004	1,394,542
+ Income-in-kind	45,997	47,782	48,687	45,943	49,838	46,955	47,084	46,749
- Depreciation	783,309	836,782	863,182	914,298	929,866	960,072	968,866	1,002,224
= Realized net income	423,519	485,521	495,710	393,980	413,936	674,848	817,222	439,067
+ Value of inventory change	14,934	135,993	664	22,878	(14,608)	(227,851)	(101,659)	193,852
= Total net income	438,453	621,514	496,374	416,858	399,328	446,997	715,563	632,919

Table 4 - Ontario and Canada Agri-Food Trade, January-December 2000/01/02 (Cdn \$'000)

Commodity group	ex00	ex00	im00	im00	ex01	ex01	im01	im01	ex02	ex02	im02	im02
	Ont	Can	Ont	Can	Ont	Can	Ont	Can	Ont	Can	Ont	Can
Live animals	407,486	1,702,394	90,377	343,073	579,004	2,349,095	79,678	321,904	549,605	2,449,411	87,477	164,605
Red meats	634,891	3,778,329	671,640	1,155,862	777,212	4,552,776	746,450	1,348,073	789,598	4,467,369	805,770	1,391,685
Fish and products	119,216	4,066,700	576,353	2,085,230	124,848	4,208,320	596,212	2,145,227	125,072	4,650,853	645,406	2,148,896
Poultry and eggs	120,818	215,234	345,418	445,226	141,756	271,639	408,230	531,408	153,334	316,745	412,800	547,366
Dairy products	82,102	281,735	268,016	450,337	156,066	417,985	334,102	525,691	138,016	352,291	297,124	503,445
Other animal products	314,555	644,814	219,028	341,383	331,473	719,899	255,769	366,342	334,656	728,712	272,291	390,149
Grains	42,774	4,298,700	213,599	374,493	55,594	4,542,165	333,889	610,910	83,104	3,519,363	293,369	824,744
Grain products	1,044,135	1,685,578	810,057	1,268,051	1,159,617	1,934,587	919,137	1,404,869	1,401,760	2,273,181	993,148	1,516,470
Oilseeds	118,302	1,705,607	207,222	294,422	126,406	1,802,760	303,356	419,720	106,477	1,549,812	311,677	371,797
Oilseed products	173,508	778,511	294,125	681,162	191,529	773,554	325,756	742,687	168,367	764,082	391,890	838,266
Animal feeds	316,865	777,915	450,384	653,275	347,145	881,364	454,085	701,252	365,935	938,637	453,351	727,473
Fruit and nuts	94,950	398,068	1,572,109	2,910,290	86,994	436,764	1,655,040	3,051,021	103,702	447,985	1,799,862	3,310,938
Vegetables	548,038	2,395,187	1,170,429	2,100,411	575,109	1,847,399	1,295,796	2,274,327	794,654	2,618,654	1,459,977	2,564,044
Seeds for sowing	37,538	222,709	155,750	225,031	24,726	201,827	169,555	237,845	21,962	213,573	159,483	217,797
Vegetable fibres	1,447	32,111	101,343	179,574	6,445	34,238	98,251	177,035	6,961	23,251	76,002	143,541
Floriculture and nursery products	271,470	723,510	180,859	319,700	306,681	800,529	197,787	349,589	317,359	795,159	198,523	360,296
Tropical products (excl. fruit)	418,774	586,264	803,801	1,414,814	473,546	674,436	769,550	1,357,935	501,153	714,318	814,437	1,495,996
Sugar and confectionery	490,912	813,216	663,944	1,039,708	599,723	1,001,934	763,656	1,214,195	652,560	1,125,183	780,751	1,179,329
Other edible preparations	421,467	701,446	842,779	1,199,921	531,283	897,254	916,166	1,298,846	585,229	1,042,718	1,141,275	1,574,387
Beverages	1,003,024	1,446,097	813,111	1,817,511	1,063,582	1,532,343	902,353	2,007,925	980,821	1,408,550	927,873	2,079,158
Tobacco and products	97,513	141,294	51,060	81,864	126,862	178,451	45,582	84,675	118,951	177,258	61,105	108,361
Other agri-food products	33,487	54,105	82,585	146,564	47,020	83,390	87,819	156,885	54,933	85,823	96,828	164,514

Ontario Animal Research and Services Committee (OARSC)

Total	6,793,272	27,449,525	10,583,991	19,527,902	7,832,620	30,142,708	11,658,219	21,328,361	8,354,209	30,662,929	12,480,419	22,623,258
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Source: Statistics Canada, International Trade Division.

Table 5 - Number of Livestock Slaughtered in Commercial Establishments^a

Canada and the Provinces, 1999 - 2002

Province	Cattle & Calves				Hogs				Sheep and Lambs			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
- '000 head -												
Nfld	1.9	2	2	2.3	6.8	5.8	4.8	4.4	3.5	3.0	3.7	4.3
PEI	28.6	28	26.8	24.4	204.7	195.0	209.0	218.8	0.9	0.6	0.4	0.4
NS	30.5	30.1	27.8	23.9	233.4	221.3	224.7	225.8	12.4	12.3	12.1	12.6
NB	24.5	20.6	19.7	18.0	181.9	202.9	228.6	208.2	2.0	2.5	2.9	3.0
Quebec	474.5	458.1	474.3	475.2	6,740.8	6,828.7	7,064.0	7,350.3	97.7	123.3	146.1	143.2
Ontario	753.6	707.0	645.5	641.4	4,732.5	4,821.7	5,015.5	5,352.3	251.8	265.4	284.1	309.4
Manitoba	39.7	39.4	48.2	44.1	2,474.2	2,790.7	3,156.1	3,554.0	20.5	18.4	23.5	22.7
Saskatchewan	331.5	292.1	252.9	272.5	1,493.9	1,524.0	1,651.1	1,934.4	22.4	23.2	25.1	25.1
Alberta	2,199.5	2,210.6	2,257.4	2,281.7	2,549.7	2,809.2	2,891.7	3,031.1	72.2	80.9	92.5	97.2
British Columbia	51.0	48.2	50.0	53.2	303.2	285.1	258.3	267.8	67.3	82.2	83.7	77.1
Canada	3,935.3	3,836.1	3,804.6	3,836.7	18,921.1	19,684.4	20,703.8	22,129.1	550.7	611.8	674.1	695.0

^a Includes federally and provincially inspected slaughterings as well as farm kill.

Source: Statistics Canada, Catalogue No.23-603

Table 6 - The Size of the Ontario Livestock and Poultry Industry

Industry	Ontario number of head				% change			Numbers in Canada			Current	Current %	#1 Province
	July 1,2000	July 1,2001	July 1,2002	July 1,2003	00/01	01/02	02/03	2001	2002	2003	Rank	of Canada	in 2000
	'000 head	'000 head			%			'000 head			#	%	
Bulls(>1 yr.)	26.0	25.0	25.0	26.0	-3.8	0.0	4.0	265.2	259.5	273.5	4	9.5	Alberta
Dairy cows	377.0	365.0	367.0	360.0	-3.2	0.5	-1.9	1,072.7	1,072.4	1,055.1	2	34.1	Quebec
Dairy heifers(>1 yr.)	184.0	197.0	199.5	206.0	7.1	1.3	3.3	517.2	512.9	509.2	1	40.5	Ontario
Beef cows	387.0	378.0	373.00	394.0	-2.3	-1.3	5.6	4,799.3	4,821.8	4,916.1	4	8.0	Alberta
Beef Heifers for breeding(>1 yr.)	71.0	82.0	74.5	82.0	15.5	-9.1	10.1	858.5	828.0	896.8	4	9.1	Alberta
Beef heifers for slaughter(>1 yr.)	180.0	162.0	167.0	177.0	-10.0	3.1	6.0	1,059.7	1,116.8	1,126.5	2	15.7	Alberta
Steers(>1 yr.)	306.0	315.0	339.0	357.0	2.9	7.6	5.3	1,658.5	1,606.6	1,618.2	2	22.1	Alberta
Calves(<1 yr.)	566.0	606.0	595.0	628.0	7.1	-1.8	5.5	5,193.4	5,217.7	5,332.8	3	11.8	Alberta
Total Cattle & Claves	2,097.0	2,130.0	2,140.0	2,230.0	1.6	0.5	4.2	15,424.5	15,435.7	15,728.2	3	14.2	Alberta
Sows & Bred Gilts	341.5	351.0	391.7	415.1	2.8	11.6	6.0	1,408.9	1,505.0	1,558.9	1	26.6	Ontario
Boars, 6 months & over	13.7	13.2	12.7	12.0	-3.6	-3.8	-5.5	44.9	43.4	40.0	1	30.0	Ontario
Other Pigs under 20kg	1,033.7	1,048.2	1046.6	1194.3	1.4	-0.2	14.1	4,210.2	4,268.3	4,605.7	2	25.9	Quebec
Other Pigs, 20-60 kg	1,167.2	1,099.7	1168.5	1032.7	-5.8	6.3	-11.6	4,413.2	4,630.3	4,289.1	2	24.1	Quebec
Other Pigs, over 60 kg	959.8	964.1	1073.6	956.9	0.4	11.4	-10.0	3,973.2	4,221.5	4,149.9	2	23.3	Quebec
Total Pigs	3,515.9	3,476.2	3,693.1	3,620.0	-1.1	6.2	-2.0	14,050.4	14,668.5	14,643.6	2	24.7	Quebec
Sheep(> 1yr.)	179.7	188.7	183.2	194.2	5.0	-2.9	6.0	651.3	667.6	671.2	1	28.9	Ontario
Lambs	132.3	151.3	151.8	158.8	14.4	0.3	4.6	596.4	584.9	577.8	1	27.5	Ontario
Total sheep & lambs	312.0	340.0	335.0	353.0	9.0	-1.5	5.4	1247.7	1252.5	1249.0	1	28.3	Ontario
Layers	8,970.0	9,229.0	9,501.0	9,323.0	2.9	2.9	-1.9	25,557.0	25,838.0	25,717.0	1	36.3	Ontario
Broilers	21,826.0	22,771.0	22,939.0	22,093.0	4.3	0.7	-3.7	75,092.0	73,206.0	68,853.0	1	32.1	Ontario
Turkeys	3,011.0	2,900.0	2,927.0	2,759.0	-3.7	0.9	-5.7	7,445.0	7,206.0	7,055.0	1	39.1	Ontario

Source: Statistics Canada, International Trade Division

Table 7 - Per Capita Consumption of Selected Foods, Canada, 1992-2002**Red Meats, Poultry Meat and Eggs**

Type	Units	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Beef:												
- Carcass weight basis	kg	32.4	31.1	31.7	31.7	31.4	31.4	31.8	32.5	32.0	30.7	30.0
- Retail weight basis	kg	23.6	22.7	23.1	23.2	22.9	22.9	23.3	23.7	23.4	22.4	21.9
Veal ^a	kg	1.5	1.4	1.3	1.4	1.3	1.4	1.4	1.3	1.3	1.2	1.1
Mutton and lamb ^a	kg	0.8	0.9	0.8	0.8	0.8	0.7	0.8	0.8	0.9	1.0	1.0
Pork:												
- Carcass weight basis	kg	28.4	27.6	28.4	27.8	25.9	25.4	28.6	30.1	28.6	28.9	28.1
- Retail weight basis	kg	21.6	21.0	21.6	21.1	19.7	19.3	21.7	22.9	21.8	22.0	21.4
Offal	kg	1.5	1.1	1.5	1.4	1.3	1.2	1.4	1.7	1.0	1.1	1.2
Total red meats ^a	kg	64.5	62.0	63.7	63.0	60.7	60.0	63.9	66.4	63.8	62.9	61.3
Stewing hen and chicken	kg	24.3	24.8	26.4	26.2	26.6	27.5	28.2	29.6	30.9	32.0	32.3
Turkey	kg	4.6	4.4	4.4	4.3	4.1	4.2	4.3	4.2	4.3	4.2	4.2
Total poultry meats ^b	kg	28.9	29.1	30.8	30.5	30.7	31.7	32.5	33.8	35.2	36.2	36.6
Eggs	dozens	14.6	14.5	14.5	14.4	15.0	15.1	15.2	15.3	15.7	16.0	15.4

a Carcass weight basis.

b Eviscerated weight. Excludes goose and duck meat.

Sources: Statistics Canada, Catalogue No. 32-229, and 32-230.

Dairy Products and Margarine

Type	Units	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Cottage cheese	kg	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8
Creamery butter	kg	2.8	2.9	2.9	2.8	2.9	2.6	2.9	2.8	2.7	2.8	2.8
Skim milk powder	kg	1.1	1.1	1.1	0.9	1.3	1.0	1.3	1.5	1.1	1.5	1.5
Whey powder	kg	0.8	1.0	1.0	0.9	1.1	0.8	0.7	0.4	0.9	1.0	0.7
Evaporated milk	L	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Cheddar cheese as such ^a	kg	3.1	3.0	3.2	3.2	3.1	3.2	3.2	3.3	3.2	3.1	3.1
Process cheese	kg	2.8	2.7	2.8	2.7	2.6	2.4	2.2	2.4	2.4	2.5	2.3
Other cheese as such ^{ab}	kg	5.4	5.5	5.6	5.6	5.7	6.5	6.3	6.2	6.3	6.3	6.5
Total Cheese	kg	11.3	11.2	11.5	11.6	11.3	12.1	11.7	11.9	11.8	11.8	11.8
Yogurt	L	2.9	3.0	3.1	3.0	3.2	3.2	3.5	4.0	4.6	4.9	5.3
Sour cream	L	1.0	1.0	1.0	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.3
Ice cream	L	10.0	10.9	11.7	11.4	10.9	10.3	10.2	10.0	8.6	9.2	9.6
Margarine	L	5.2	4.9	4.3	5.1	5.3	5.4	5.4	5.2	5.0	4.9	4.8

a Not including cheddar and other cheese used in process cheese.

b Per capita consumption of whey and skim milk cheese is included in this category.

Source: Statistics Canada, Catalogue No. 32-229, and 32-230.

OARSC Subcommittee Reports – (2003)

Aquaculture

Executive Summary

Ontario's aquaculture industry remains at an important crossroad in its developmental progress. The province possesses all of the infrastructure and expertise necessary to support a significantly larger fish-farming sector than currently exists. Slow progress in addressing the conflicts and impediments inherent in the confused regulatory framework surrounding aquaculture continues to stifle growth of the industry. The issue of First Nations' land claims remains unresolved and still stands in the way of new cage culture site approvals. While market demand for Ontario aquaculture products is strong and increasing, fish farmers remain frustrated by the lack of progress in resolving government impediments to the growth of their industry. Creating an environment conducive to expansion of the industry will require an acknowledgement by all levels of government that a successful aquaculture sector is desirable and beneficial for Ontario.

The main issues facing the industry remain unchanged from the previous year. The committee endorses the continuance of all research recommendations detailed in our 2000 Strategic Report and all Service Priorities detailed in our 2002 Annual Report.

Mandate

The Ontario Aquaculture Research and Services Coordinating Committee (OARSCC) was established in 1985. OARSCC provides a forum for the exchange of ideas between the industry and those government agencies that administer relevant legislation, or which provide services to fish farmers. The committee also serves as one of twelve species subcommittees of the Ontario Animal Research and Services Committee, which is part of the umbrella Ontario Agricultural Services Coordinating Committee. This structure is a component of a well-established system of committees that coordinate agricultural research and service priorities at both the federal and provincial levels.

OARSCC strives to identify and establish, on an annual basis, high priority requirements for aquaculture research and service programs in Ontario, with the goal of encouraging the orderly expansion of the industry. The committee also endeavours to ensure liaison and communication between those agencies and groups that have a primary interest in the long-term development of aquaculture in Ontario.

Industry Overview

For the past seven years, Ontario's aquaculture industry has operated under an 'unofficial' moratorium on significant expansion, resulting from an overly constraining regulatory environment. Total production for human consumption has remained effectively stalled within a range of approximately 4,000 metric tonnes, plus or minus 10%, since 1996. No new cage culture sites have been approved during the past year and likely will not be approved in the near future. As well, confusion arising from the co-management of public waters by the Ministry of Natural Resources and First Nations groups exercising land claims, is adding to the difficulty of establishing new sites. The pace of the joint industry-government working group on issues regarding cage culture operations remains glacial.

Canada's federal Department of Fisheries and Oceans has moved ahead with its initiatives to recognize and support aquaculture. A federally sponsored and collaborative, industry-government research and development program (Aquaculture Collaborative Research & Development Program – ACRDP) is successfully underway and a number of research projects directly addressing priorities identified by OARSCC have commenced.

Demand for Ontario aquaculture products is strong and growing, yet industry participants are increasingly frustrated by the provincial government's constraint of fish farming. Aquaculture is a form of primary production that has the potential to contribute much more to Ontario's economy than currently exists (\$50–60 million in 2002, Aquastats 2002, University of Guelph). If the industry is not permitted to grow, the “multiplier” benefits from this primary production will not be realized and consumer dollars will increasingly be spent on imported fish products. The experience and expertise that has developed in Ontario's aquaculture sector over the past thirty years will not be retained if potential new entrants, as well as existing farmers, do not see reasonable access to these expanding opportunities. Ontario possesses the natural resources, experience, expertise, infrastructure and market opportunities to sustain a significantly larger, yet still sustainable aquaculture industry than currently exists. The missing component is a more enabling and stable legislative and regulatory environment in which to do business.

Ongoing Priorities

The Aquaculture Research and Services Coordinating Committee would like to emphasize the importance of maintaining the current level of ongoing activity in the following areas:

Genetics, Breeding and Reproductive Control Research

Very little is known about the genetic make-up and potential for improvement of performance of the rainbow trout stocks cultured in Ontario, and we are therefore not fully exploiting the genetic potential of our domestic stocks of fish. We need to determine genetic variability, specific parameters, and gene-environment interactions affecting growth performance and disease resistance in rainbow trout, with the aim of improving those stocks. We need to enhance reproductive cycle control and reproductive performance, and work on gene mapping of desirable production traits in existing rainbow trout, Arctic charr, and other salmonid stocks.

Nutrition and Bioenergetics Research

Research to reduce the present cost of feeding salmonids through diet optimization, improved feed processing techniques, and feeding strategies must continue, as well as the development of production diets and feeding regimes for alternate species with commercial potential in Ontario.

Economic Analyses, Industry Profile and Marketing Research

The collection of the “Aquastats” database is vital for production management and forecasting of Ontario aquaculture. Successful extension work includes ongoing identification of those management factors that contribute to farm profitability and evaluation of the best methods for enhancing them.

Main Issues Affecting Aquaculture Sustainability In Ontario

1) Profitability

Production of food grade fish on a commercial scale must demonstrate improved and sustainable profitability if aquaculture hopes to become a significant industry in Ontario. Although a number of fish farms enjoy financial success by addressing specific market niches, such as live fish sales for various purposes, the history of larger-scale production has not been encouraging. The fundamental reason behind this problem is the fact that wholesale prices for rainbow trout at the farm level have not moved much for two decades, while input costs have risen substantially. Other farm sectors have also faced the same problem, but have had greater success in bringing down costs of production. Aquaculture is also gaining significant additional costs through added regulatory burdens.

Much of the ongoing research and service activity at the University of Guelph relates to the issue of profitability, particularly in the areas of health management, nutrition and bio-energetics, and genetics, breeding, and reproductive control. This work must continue, with an intensified focus on projects having the most potential to directly lower the unit cost of production.

Increasingly, profitability is being negatively affected by the interplay between environmental issues and the constraining regulatory framework surrounding aquaculture in this province.

2) Regulatory Framework

Aquaculture does not readily fit into Ontario’s existing legislative or regulatory framework. At present, neither the Ontario Environment nor Natural Resources Ministries have been prepared to acknowledge that the growing of fish for human consumption is essentially an agricultural activity. Until that recognition is achieved, it is doubtful that any coherent provincial policy governing fish farming can emerge. In the meantime, aquaculture development is burdened or thwarted by uncertainty and uneven application of regulations, as well as the application of regulations written for other activities. The cost in time, effort, and direct financial outlay to the industry from this situation has had a considerable negative impact on profitability.

The Ontario Ministry of Agriculture and Food needs to continue its strong advocacy of aquaculture and promote acceptance of fish farming as an agricultural activity.

Examples of two key regulatory points that give rise to numerous related problems are the categorization of fish manure as an industrial, rather than agricultural, waste product and the failure to accept domestically raised fish as private rather than public property.

3) Environmental Issues

Public scrutiny of all aspects of water use is increasing, concurrent with continued vocal criticism of aquaculture by environmental organizations across the country. Regulatory agencies require data on the industry's environmental footprint within Ontario, to evaluate the negative impact claims of aquaculture opponents. Although controversial regulatory issues are often decided based on political, rather than on a scientific basis, sound scientific evidence is essential in today's public environmental arena. As an industry, aquaculture in Ontario has neither the size nor the profitability to contend with this opposition on its own.

Work aimed at developing site assimilative capacity models is presently underway at the University of Guelph and by a multi-agency/stakeholder committee led by the Ministry of the Environment.

For the cage sector, much of the concern surrounding perceived vs. actual environmental impacts could be alleviated if investigation of decommissioned or fallowed sites indicated that these areas returned to a "natural state" relatively quickly. Regulation based on a mass nutrient loading approach, combined with information on required regenerative periods of over-exploited sites, would also allow the cage sector of the industry to work towards an operational model involving site rotation, analogous to the practice of field rotation in land-based agriculture. For inland sites, regulation based on the annual nutrient loading from a facility as well as the assimilative capacity of the watershed, would permit evaluation of the impact of a particular fish farm relative to other nutrient sources.

4) Competitiveness

Ontario fish farmers must compete with food products coming from traditional capture fisheries, from other aquaculture industries, especially those of Canada's east coast, and perhaps most importantly, from other red or white meat industries such as beef, pork and poultry. Key to this issue is the need to continually strive to lower production costs and to market products that readily gain consumer acceptance.

Fresh rainbow trout, primarily in boneless, filleted form, constitutes Ontario's main aquaculture product. To effectively compete with other red and white meats, diversification and refinement of consumer products is necessary and desirable. With regard to lowering production costs, the most potential gain would come from development of less expensive feeds.

5) Public Perception

In spite of the vocal criticism of aquaculture by environmental activists, there remains a strong perception that aquaculture is an industry of the future. While this perception is largely based on the sad realization that the law of the commons will inevitably lead to the end of the global capture fisheries, it is nonetheless a strong positive force for the industry and should be emphasized with respect to the future potential of fish farming in Ontario. Additional opportunities to win support for the industry stem from increasing public awareness of the health benefits of fish consumption, which are significant. Since Ontario fish farmers lack the resources to directly counteract the negative media campaigns of large, non-governmental organizations opposed to aquaculture, efforts should be made to gain public support through communicating those beneficial aspects of the industry which are generally accepted and difficult to dispute.

The University of Guelph/OMAF Aquaculture Centre currently handles much of the public and media advocacy for the industry. The Ontario Aquaculture Association lacks the size and resources to be effective in that area. Public perception will play a significant role in determining the future of Ontario fish farming. The Aquaculture Centre has the capability to take a more active role in public media advocacy for the industry and should extend its activities in that direction. This is unlikely to occur however, since recent restructuring of the OMAF-UG agreement has led to the termination of many of the extension activities previously undertaken by the Aquaculture Centre.

Conclusion

Significant future expansion of the aquaculture industry in Ontario can still occur, although the window of opportunity for the aqua-farming sector will not stay open indefinitely. Ontario possesses ALL of the infrastructure requirements to enable this expansion and follow the global trends in aquaculture growth which have averaged 11% per annum increases on average over the last decade. Unlike many other meat commodity industries which predict, at best, only steady-state demands for their production, there are a plethora of credible reasons why aquaculture can, and will, expand dramatically over the next few decades. Both land-based and near-shore cage culture operations in Ontario are viable, however, Ontario's regulatory and economic climate will continue to be the largest factors influencing the growth of aquaculture here.

Notwithstanding these constraints, it is of the opinion of many experts that aquaculture has a dramatic potential for growth over the next 2 decades. The province must seize the opportunity to expand, diversify and stabilize its agricultural sector through the production of aquatic food products.

Beef

Executive Summary

Procedure

Due to the impact of BSE on the beef industry this year, the subcommittee elected to forego a physical meeting. Instead, subcommittee members were polled via email with a structured question/response format to elicit their input on priorities and the process to be implemented for the upcoming 2004 strategic report.

Ontario Beef Industry Issues

International Trade Restrictions Due to Bovine Spongiform Encephalopathy

This is **the** overwhelming issue facing Canada's beef industry. The detection of BSE in one animal has caused a devastating restriction in trade in beef meat and cattle with other countries. Historically, Canada exported 50 - 60% of beef industry output. These marketing avenues closed immediately with the announcement of the presence of BSE. Although Borders are slowly reopening in a graduated manner based on level of risk by product type and animal age, the impact of this crisis will be felt for years.

Deadstock Disposal

Legal disposal options for dead farm animals in Ontario are limited. The deadstock collection/rendering industries have been characterized by marginal financial viability over time. The impact of the BSE crises has exacerbated the situation, with many producers now facing significant fees for dealer pick up, or total lack of service. The impending potential for a large number of cull cows to be disposed of is elevating the issue. There is a need for a provincial plan to help producers to deal with this issue.

Untied States Country of Origin Labelling

There has become a higher profile issue with the advent of BSE in Canada. It is a regulatory initiative invoked by the U.S. government. It will require that beef packaged be labeled to reflect the country in which the meat originated. This is a significant threat to Canada since we have traditionally exported over 50 % of our production, with the US being the primary export market. It will impose major additional costs on meat processors who will have to sort product and maintain separate production lines or runs to ensure the integrity of their identification process. This will reduce profit in that sector which will be passed on as lowered product prices to producers. It will also create a barrier to Canadian exports to the US as their processors may choose to exclusively source US product to minimize the extra effort to meet the regulations.

Agriculture Policy Framework

This governmental policy will set the environment for Canadian producers for the next five years. The five pillars are key, particularly business risk management, food safety and environment. Equivalency of Ontario with competing jurisdictions (e.g. Quebec) is essential for the Ontario industry to compete.

An effective disaster program is critical, as highlighted by the impact of the BSE crisis on all sectors.

Revised Research Priorities, 2003 *

The 2002 list was reviewed. A number of priorities were amalgamated and some were re-ranked.

<u>Rank</u>	<u>Issue</u>
1.	Quality Product ▪ Innovative products(12) ▪ <i>Nutraceuticals/processing methods/</i> ▪ <i>human pathogen management</i>
2.	Safe Product ▪ <i>rapid BSE testing</i> ▪ <i>BSE prevention</i> ▪ <i>Geographic database</i> ▪ <i>Zoning</i>
3.	Improved Animal Health ▪ <i>rapid BSE testing</i> ▪ <i>BSE prevention</i>
4.	Beef Production and the Environment ▪ <i>Environmentally friendly(6)</i> ▪ Improved Feed Efficiency(4) Intensive Beef Operations (5)
5.	Information Feedback
6.	Pasture
7.	Barns and Facilities
8.	Reproductive Technologies

- italics denotes change or addition to 2002 list. Bracketed number denotes priority rank in 2002

Technology Transfer Priorities, 2002

- **Environment**
- **Quality Assurance**
- **Production and Marketing.**

Technology Transfer Priorities Added, 2003

Better OMAF / UG relationship

- Who does what
- Funding
- Coordination of activities

Future of beef production post – BSE

- Where do we go from here
- Processing facilities
- Marketing structures

Suggestions for 2004 Strategic Process

- More involvement of Federal Gov't Representative
- Make the strategic year **the** event for planning, once every 4 yrs; intervening years tend to be calendar fillers which really don't add a lot of value to the process; reducing the number of meetings would increase the interest level and participation rate; option for chair to call an intermediate year meeting if necessary
- dismantle the entire OASCC system and start over; current system serves and creates bureaucracy and is an inefficient way to achieve the worthwhile goals

Dairy

Executive Summary

The Ontario Dairy Research and Services Committee (ORDSC) met on September 3, 2003 to identify “emerging issues” of the Ontario dairy industry and to begin the process for Dairy Research recommendations to the Ontario Animal Research and Services Committee in 2004.

In 2000, OARSC implemented a four year cycle, concentrating on different issues in each year. This year the report focuses on “Emerging Issues”.

The committee identified nine emerging issues:

- Reproductive Performance
- Enhancing Production Systems
- Environmental Issues
- Animal Care
- International Issues
- Epidemic Diseases
- Farm Business and Structure
- Lack of Future Trained Professionals
- Genetics

The emerging issues will be used, in part, for the development of the 2004 Research recommendations for the Ontario Dairy industry. The committee has begun planning for the 2004 report.

The committee is scheduled to replace 5 members from research and industry.

Industry Update

Overview

- Total milk production in Ontario was down 2.5 % for the dairy year ending July 31, 2003. Actual production was 2.499 billion litres, compared to 2.564 billion litres in 2002.
- In December 2002, a WTO Appellate Body ruled against Canada in the long-standing dispute that was launched by the United States and New Zealand in regard to Canada’s contract export program. The Appellate Body upheld the finding that Canada had provided export subsidies for milk in excess of its WTO commitments. In order to comply with the WTO decision, the Export Contract Exchange was closed down immediately while the Federal and Provincial governments and industry assessed the impact of the WTO ruling. A mailing was made to all producers in late February advising of the actions that had been taken by DFO to comply with the ruling. DFO announced that it was rescinding the exemption that had been provided for non-quota holders to market export milk and that they would be permitted back into the domestic marketing system given that they purchased the minimum level of quota. This was in concert with the direction taken by marketing agencies in all other provinces. On May 9, Canada

announced that it had reached agreement with the U.S. and New Zealand on measures to comply with the WTO ruling.

- DFO has been involved in several disputes regarding the steps it took to comply with the December 2002 WTO ruling. Two groups took their concerns to the Ontario Agriculture, Food and Rural Affairs Appeal Tribunal. The Tribunal initially ruled in favour of one of the appellants but the Minister of Agriculture and Food subsequently overturned this decision. The Tribunal denied the second request. Another group of three producers had their licenses cancelled as a result of marketing activities that were undertaken in contravention of the Milk Act. This matter has been appealed to the Tribunal as well with the process not completed at the time of preparing this update.
- 2003 also will be known as the year that BSE, or mad cow disease, became an issue in Canada. It was announced on May 20th, that a single cow in Alberta was found to have contracted BSE. The U.S. then closed its borders to Canadian meat and live animal imports. This resulted in a disastrous situation for Canadian beef and dairy producers as a significant proportion of Canada's beef, veal, cull cows and breeding stock exports normally go to the U.S. For instance, it was estimated that prior to May 20th, about 70 % of cull dairy cows from Ontario were being exported to the U.S. for slaughter there. As well the U.S. had been a good market for Canadian replacement heifers and other dairy breeding stock. In early September, the border was re-opened for the export of some boxed meat products but live animal exports were still banned.
- On August 14, 2003 Ontario as well as parts of the Northeastern U.S. experienced a power outage that left some parts of Ontario without power for up to 26 hours. This led to several challenges from a milk marketing standpoint, as most of the processors were unable to receive and process milk for at least a portion of the time. Some milk was moved to Quebec and Manitoba for processing. DFO was able to market about 95 % of the milk that would have normally been marketed on August 15.
- Gordon Coukell was re-elected Chair of Dairy Farmers of Ontario, and Bruce Saunders Vice-Chair in January following the DFO Annual Meeting.

Herd and Farm Profile

- In July 2003, 5,586 milk producers sold milk to DFO compared to 5,938 a year earlier. There were also 92 cream producers in July 2003 compared to 107 a year earlier.
- Ontario DHI statistics show average performance of published records at 8,593 kgs of milk, 322 kgs of butterfat and 280 kgs of protein. Just over 71 % of the dairy herds in the province are on some form of milk recording.
- As was the case the last several years, new dairy barn construction continues in Ontario, with new facilities being predominantly free-stall barns with bunk silos and, in some

cases, commodity sheds. A movement to the Automated Milking System (AMS) or the “robotic milker” has also been evident in recent years.

Milk Marketing Conditions

- Producer quotas were increased by a total of 4.6 % between December 2002 and June 2003. As well 1.25 quota days were added for the months of May, June and July. This is the equivalent of about 4.2 % of additional quota per month. This was followed by the fall production incentive program of 2.25 quota days for the months from August through November.
- A new payment policy was introduced in April. It involves three levels of payment. For shipments up to 100 % of quota plus any incentive days, payment is made at the within-quota price. For shipments between 100 and 103 % of quota, producers receive a payment based on the prevailing world prices for butter and skim milk powder, with any shipments over 103 % receiving zero payment.
- Average provincial component tests changed marginally for the dairy year ending July 31, 2003. Butterfat average for the year was at 3.92 kg/hl compared to 3.90 kg/hl a year earlier, while protein was at 3.33 kg/hl compared to 3.34 kg/hl the previous year.
- Component prices for within-quota shipments during July 2003 were as follows: (July 2002 figures in brackets) Butterfat \$6.30/kg (\$5.78); Protein \$9.39/kg (\$9.28); Other solids \$1.31/kg (\$1.32). The average gross return for milk marketed within quota during July 2003, was \$61.44 per hectolitre, compared to \$59.34 per hectolitre in July of 2002. Payment for milk shipments between 100 and 103 % of quota averaged \$17.11 per hectolitre in July 2003.
- Quota prices in Ontario have varied in the last year with a low in September 2002 of \$23,095/kg to a high for the year at \$27,000/kg in February 2003.

WTO Doha Development Agenda

- The fifth WTO Ministerial Conference took place in Cancun, Mexico from September 10 to 14. The ministerial conference is the highest-level decision-making body. The main task of the Cancun meeting was to take stock of progress in the negotiations and other work under the Doha Development Agenda.
- After a week of fairly intensive discussions and negotiations, the WTO negotiations collapsed in the final hour. Early indications were that the differences between the rich and poor nations were too great and could not be overcome. It was reported that the developing countries had refused to let the United States and Europe steer the negotiations to suit their interests. However, a proposed framework for agriculture discussions did not look encouraging for supply management. The immediate result is that increased attention is being devoted to the WTO negotiations by the supply-managed commodities.

Canadian Quality Milk (CQM) Program

- CQM is a HACCP-based program that focuses on prevention and early detection and will enhance the existing raw milk quality program in Ontario. The four key elements of the program that will be implemented province wide are:
 1. Time and temperature monitoring of CIP systems and milk cooling and storage.
 2. Livestock medicines management certification including storage, record keeping of treatments, animal identification, and treatment and milking procedures.
 3. Farm-specific standard operating procedures (SOPs) for milking, livestock medicines, animal identification, farm-labour training, pesticides management relating to homegrown feeds, and medicated feed management.
 4. Water testing to verify potable water is used to clean milking equipment.
- The rollout of the program to all Ontario farms began in June 2003 with a mailing to all producers containing information and templates to complete the standard operating procedures. SOPs completed by September 30th were eligible for a \$200 grant, as part of funding that had been received from Healthy Futures for the CQM program in Ontario.

Dairy Products Reasonably Priced

- Price comparisons between the U.S. and Canada continue to show that, overall, Canadians are paying lower prices for a “basket” of dairy products. The most recent semi-annual survey conducted by Dairy Farmers of Canada, based on Agriculture Canada survey methods in December 2002, showed that on average, Canadians pay about 16 per cent less for their dairy products than Americans do. At less than 2% of take-home pay, Canadians have the most reasonable priced dairy products in the world.

Government Relations Still A Priority

- In addition to ongoing efforts to develop a strong, united and coordinated support for the marketing system at the provincial and federal levels, DFO directed attention to several pieces of legislation before the Provincial Legislature.
- The Food Safety and Quality Act was passed in the Legislature on December 5, 2001. DFO was concerned about the repeal the Edible Oil Products Act which was included in this legislation. DFO has argued that it provides the legislative framework to protect the identity and integrity of dairy products from imitations and substitutes. While it was suggested that there are federal regulations in place to address concerns, DFO believes that not to be the case. The repeal of the EOPA pushed back to June 2004 to allow time to more fully address concerns.

- Provincially, DFO is working with OMAF staff and the Ontario Dairy Council to identify the gaps that we feel need to be addressed. DFO has also been pursuing the matter at the federal level with Dairy Farmers of Canada (DFC) and the Canadian Food Inspection Agency (CFIA) in an attempt to strengthen the CFIA's Guide to Food Labeling and Advertising.
- Another piece of provincial legislation, the Nutrient Management Act, which was passed in June 2002, is also being monitored. DFO has worked in partnership with the Ontario Farm Environmental Coalition to help shape regulations that reflect the diverse needs of all Ontario farmers.
- DFO, through the national organization DFC, has asked the federal government to strengthen import controls to cover dairy blends and dairy ingredients because of concerns about increasing levels of importation.
- DFO also participated in numerous consultation stages during the development and refinement of the federal government's Agriculture Policy Framework (APF). DFO's vision is in concert with the APF five pillars of food safety and food quality, environment, science and innovation, renewal, and business risk management.

Dairy Farmers of Ontario's Research Support

- Dairy Farmers of Ontario continues to support agriculture and agri-food related research based upon a research check-off on all domestic milk marketed. Over the past year DFO supported more than \$1 million in various research projects and activities. Most of this funding supports work at the University of Guelph with some funding also going to Agriculture and Agri-Food Canada Research Stations.

Emerging Issues

The ODRSC committee identified nine emerging issues expected to have impact on the Ontario dairy industry in the upcoming years. The committee identified the first four as higher priorities. The other five were ranked as medium priority.

A. Reproductive Performance

Reports from some producers and veterinarians indicate a drop in reproductive performance and conception rates on some Ontario dairy farms.

While significant information is available, research and extension efforts need to continue into reproductive physiology and farm management as it relates to production efficiency, animal health and farm profitability.

B. Enhancing Production Systems

Producers continue to need and demand current information on all aspects of the production systems best suited for Ontario operations.

- Feeding and Nutrition
- Housing, Facilities and Equipment
- Mastitis and udder health
- Water quality for animal consumption and cleaning. In some areas of the province, the water maybe high in minerals or bacteria in untreated water.
- Calf raising including diseases, accelerated growth , reducing stillbirths
- Transition cow management including the use of shorter dry periods, body condition scoring and light management

C. Environmental Issues

Both producers and the public have raised awareness of environmental concerns and the potential impact on current and future agricultural practices.

Areas of interest to the dairy industry include:

- waste management storage, handling and application
- handling and disposal of dead stock and the development and utilization of environmentally friendly co-products,
- production and use of alternatives energy sources including bio-gas, bio-diesel, steam and wind
- impacts of current and future legal requirements and international agreements

D. Animal Care

Quality animal care and well being are important to a productive and profitable farming operation. New research on the best standards for care including facilities, health, nutrition and management continues to progress and advance.

A review of the advantages and disadvantages of allowing downer cattle to be processed for meat purposes is needed. If allowed to continue, are the current regulations requiring veterinarian certification appropriate?

E. International Issues

The industry has been impacted by recent international trade and health decisions. In 2003, the impact of the WTO decision to eliminate the option for producers to export milk and the impact of the border closure to both cull cows and cattle sold for dairy purposes as a result of the single BSE case have had a significant impact on the dairy sector in

Ontario. Contingency plans need to be developed to minimize the impact of future international health and trade rules and decisions.

International agreements, such as the Kyoto protocol, can have a major impact on the operation of Ontario farms. Producers need information on the impacts and the best way for the industry to respond to the requirements.

The development and market expansion of innovative products that can utilize production needs to continue and expand. Example in the dairy sector may be Conjugated Linoleic Acid (CLA), DHA/omega 3 products or other niche market opportunities. Innovation domestically may lead to possible opportunities into the international markets.

F. Epidemic disease issues

Disease outbreaks can have devastating impacts on individual operations or potentially the entire industry. The industry is aware that diseases can move around the world in a short period of time.

Preparations for the control of infectious diseases, zoonotic diseases, and production limiting diseases are needed at both the individual producer level and at the provincial and national levels.

Contingency preparation is needed for emergency disease outbreaks and issues.

Further attention needs to be addressed to the risk of anti-microbial resistances and potential alternatives to minimize the risks.

G. Farm Business and Structure

The cost of starting in the dairy business or expanding the dairy business continues to increase. Potential new entrants often find that they do not have sufficient finances to start an operation. The creative use of both new and existing business structures needs to be explored to support the business transition between generations and to provide alternatives available for current businesses arrangements.

New and innovative business structures, such as "joint ventures" between unrelated families may be one option to allow farmers to develop non-family succession plans, when there are no family members available to continue the operation in the next generation.

In other situations, amalgamation of operations may be an option to allow sharing of investment, resources, labour and time commitments.

H. Lack of professionals currently being trained

The livestock sector needs to be supported by qualified and trained professionals including veterinarians and animal scientists focused on dairy production.

There is concern that there are not sufficient individuals being professionally trained for the future needs of the industry.

I. Genetics

Producers need information on potential gains that can be made with overlooked breeding opportunities.

On the other hand, concerns have been raised with the current level of inbreeding in Canadian dairy breeds. The Ayrshire breed in Canada has an average inbreeding level that exceeds 5.3%. The Holstein breed is 4.91%. Genetic diseases, for example Complex Vertebral Malformation CVM) are a concern.

Recommendation**Downer Animals**

That a review be completed into the advantages and disadvantages of allowing downer cattle to be processed for meat.

Equine

Executive Summary

The Annual Committee Meeting was held at the University of Guelph on September 9th 2003. Attendance was strong despite the fall being a busy time in the equine industry.

This report represents an attempt to present an accurate analysis of the equine industry, the emerging issues that have transpired over the recent year, and describe the initial planning process as we prepare for the upcoming four-year mandate. The priorities set out at the beginning of our four-year mandate were viewed and examined. Although there has been some evidence of the general economy slowing, the equine industry is remaining strong and reporting growth in most disciplines.

As in the past, services and support is still of major concern although some sectors are implementing training and licensing programs to address these concerns. Unfortunately the only sector not reporting strong growth is the breeding sector; sale prices for yearlings are still down with decreases in number of horses sold. This was of concern for the Committee and was cited as a problem area and perhaps an emerging issue as far as future supply and industry support. Other emerging issues such as West Nile, Neonatal Loss Syndrome, and drug residues had previously been identified by this Committee, however a need for some mechanism that would allow speedy reporting of outbreaks and availability of information on these topics is paramount, as well as being areas for future consideration and development.

Industry Scan

The industry has continued to grow and perform well, following the increases as stated in the 2002 report. At that time the racing industry was strong due to the introduction of slots at most of the major tracks. Since that time, many of the smaller racing venues now participate in the slot program. This has given racing a much-needed boost and has benefited not only the industry as a whole, but also the horsemen and tracks. This very appealing purse structure has lead to influxes of non-Ontario horses and trainers, this and other licensing issues will have to be addressed by the Racing Commission and OHRIA. Under the present contract a portion of the monies generated by the slots goes to the tracks or the horsemen in the way of purse adjustments. It has been recognised that this arrangement may not be totally equitable to all areas of the racing industry for which it was originally intended. Although there are efforts by the Standardbred sector to channel some of this added revenue to breeding incentives as a whole, direct funding to the breeding sector as well as to the horse in the way of research, medical and other support services are not benefactors of the slots revenue. It is the Committee's understanding that the original agreement concerning slots will be up for review in the near future and perhaps these issues can be addressed at that time.

As mentioned before and above, despite predictions that the breeding industry was improving and following the leads set by the racing industry, this has not materialised. This could be due to the ongoing demand for race ready horses and hence a 'claiming'

market, the lack of breeding incentive programs, lack of economic information, research and adequate venues to market and sell stock. Unfortunately, the recent thoroughbred sales were poor, with sale prices way below average, while the Standardbred sales remain steady. One major concern to the breeding industry is the future of Armbro Farms, one of the premiere stud farms in North America. It's sale and possible disbursement could have a major impact on Standardbred racing, and definitely breeding in Ontario.

The riding and performance horse industry report sustained growth, with numbers in the Ontario Equestrian Federation (OEF) growing as well as horse show numbers increasing to almost doubling in number of entrants in some of the discipline in the last two years.

Of major interest is the insurgence of funding to the Equine research program from sources other than OMAF. To date \$4.784 M has been provided by industry, private donors and matching programs to assist in faculty/research positions, technology, equipment and research projects. Many of these dollars have gone to very costly equipment, such as VO2 max system, Computerised Tomography, 3D optical Acquisition and Analyses System, and an MRI. Although some of this equipment is of a diagnostic nature, all of it will be incorporated in the research programs in one way or another as well as servicing the equine industry. Six new faculty positions have been added in the area of clinical medicine and all are either equine specialists or their speciality includes the horse. All of these individuals have strong research backgrounds and interests in equine research.

Activities since the 2002 Annual Report

No responses were received from organisations that were forwarded the 2002 service recommendations.

Review of Issues and Priorities

The issues were reviewed, some new issues were discussed by the Committee concerning education, economic information on the industry, and research protocols. These will appear in the recommendation section or be carried forward to the upcoming strategic plan in 2004.

As to date the issues and research priorities as laid out in 2004 will stand. Below is the list of research priorities, goals and the corresponding research projects.

Fur-Bearing

Executive Summary

Activities since the 2002 Annual Report:

The chairperson met with the directors of the Ontario Fur Breeders Association (OFBA) in August 2003. At that time the OFBA did not feel there was a need for the Fur-Bearing Sub-Committee to meet in 2003 to discuss industry issues. The directors felt the primary issue facing the industry was how to dispose of carcasses, given the rendering industry's decision to not accept mink carcasses.

Review of Issues:

Dead Animal Disposal – Ontario's 75 mink and 20 fox farms are expected to produce approximately 400,000 farmed mink pelts and 1,000 fox pelts/year in 2003-2004. The primary pelting season extends from the end of November to middle of December; however some mink implanted with melatonin are pelted during October. Each mink pelted generates an average of 3.5 lb. of carcass and 1 lb. of fat scraped from the raw pelts. The total volume generated each year is 1.4 million lbs. of carcasses and 400,000 lbs. of fat. The average mink farm will produce about 5,300 pelts, 19,000 lbs. of carcasses and 5,300 lb. of fat.

Prior to 2001 the rendering industry picked up the carcasses and fat. In 2001 the rendering industry announced mink carcasses would no longer be accepted. Despite this announcement carcasses were collected by the rendering/dead stock sector during 2001 & 2002. However as a result of BSE, the rendering/dead stock industry will not be collecting carcasses or fat in 2003. In a 3-4 week period (November to December) the Ontario fur farming industry will have to dispose of 1.4 million lbs. carcasses and 400,000 lbs. of fat on-farm either by burial or composting. OMAF and the OFBA will be setting up composting demonstration sites this winter to monitor the on-farm composting efforts.

If the collectors changed their policy to pick up carcasses and fat, the disposal cost will be in the range of \$75/pick up, plus 5 to 7 cents per pound. For an average sized mink farm this disposal fee would be equivalent to \$1,400 to 1,700/year or \$0.25 to \$0.30/pelt.

Goat

Executive Summary

The 2003 Subcommittee meeting was held October 24 in Guelph.

Although growth in the industry has slowed in the past year, it remains the largest provincial herd, and processing industry in Canada.

Issues identified at this year's meeting include:

- o Market development
- o Milk quality
- o Inability to identify superior genetics
- o National ID & On-Farm Food Safety Program
- o Agricultural Policy and Trade Issues
- o Consumer Issues

State of the Industry

Dairy

Growth in the dairy goat industry has slowed considerably compared to previous years. In late 2002, processors began limiting the volume of milk and increasing the quality criteria on milk shipments.

With one additional co-operative formed in 2002, goat milk producers have more marketing alternatives than several years ago.

Breeding stock prices have softened in the past year. Reduced demand results from few new entrants into the industry, as well as loss of sales with U.S. border closure to Canadian ruminant livestock.

The Ontario Goat Milk Producers' Association is currently in the process of soliciting industry support for a "price-setting" board under the Farm Products Marketing Commission.

Meat

Market prices of meat animals have remained fairly constant compared to last year, and appear unaffected (to date) by the U.S. border closure to Canadian ruminant livestock. However, the industry has been greatly impacted by loss of sales of breeding stock to international markets, particularly of Boer goats. A number of producers have had to seek off-farm employment due to significant lost income.

Review of Issues

1. **Market Development Issues** – a number of issues were discussed that deal with continued market development. Seasonality of milk supply results in overproduction during the summer months. Unfortunately, the greatest processor demand period is from September to December (the Christmas season is one of the largest market opportunities for specialty cheeses during the year). Continued efforts to match supply and demand are needed if market growth is to be improved. As well, there has been limited market development of additional cheese varieties and other products (that have longer shelf-life and could be produced with “oversupply” milk) mostly due to the additional financing required.
2. **Milk quality** – improved frequency of testing, and timely access to test results have enabled producers to respond promptly to higher than normal test results, ensuring milk quality meets the standards set by the processors. However, most producers are on once-a-week pickup. Cost / benefits of more frequent pick-up need to be investigated, particularly with a focus on how it affects milk quality parameters of the raw milk and the finished product (flavour, texture and palatability).
3. **Inability to Identify Superior Genetics** - Production costs can only be offset by improved production (better growth rates and higher milk production), or better prices. Improving production relies on selecting “superior” animals to include in future breeding programs. Identifying these “superior” animals can only be truly achieved with performance programs. Current programs for meat goats are non-existent. Those for dairy goats are costly. The cost per test is the same regardless of animal type, so cost per goat per year is the same as cost per cow per year, resulting in non-affordable cost per litre of production. Very few commercial producers can justify this cost, even though they recognize the benefit these programs offer from a genetic improvement standpoint. A more cost effective method of identifying animals with superior genetics is needed.
4. **National Identification and On- farm food safety program** - The two goat organizations in Ontario recognize the importance of National Identification and Canadian On-farm food safety programs in maintaining consumer confidence and, access to markets outside the country. Neither can participate in the manner they wish, because of lack of funding. Both organizations have no formal funding source, so rely on their executive and directors to represent the organizations on a volunteer basis. With no checkoff program in place to help provide funding, they have no available dollars to participate in these programs, to ensure components are developed with the interests of the goat industry in mind. Suitability of tags and concerns regarding tag retention were identified as challenging, in light of goats’ tendency to “nibble” on anything novel.
5. **Agricultural Policy and Trade Issues** – discussions included:
 - a. domestic milk quality standards being higher than those in some countries whose products are sold in Canada;

- b. accessing the export market for raw milk in the U.S. has been limited through the required USDA import process;
 - c. health of national herd being used as non-tariff trade barrier
- each of these will have to be investigated further to determine what impact they may have on the industry, particularly with respect to marketing.**

Consumer Related Issues – proposed E.U. regulations on product naming which would restrict use of certain names to products produced in E.U. countries. With particular reference to cheeses, consumer recognition of Canadian / Ontario products will be challenging if they have to be “renamed”.

Pork

Executive Summary

This report highlights the current state of pork production in Ontario. It re-states the issues and research recommendations from the 2000 Strategic Report, and identifies emerging issues, and issues growing in importance, which appear set to challenge the viability, competitiveness, and sustainability of pork production in the province. Foremost among these are issues related to international trade, national and international competitiveness, producer viability (production margins), food safety and animal well-being - all important to an industry dependent on export as well as domestic markets.

Industry Scan

The following tables present a picture of pork production in Ontario.

Table 1. Ontario Swine Industry 1997-2003.

	1997	1998	1999	2000	2001	2002	2003
Number of Pigs on Ontario farms ('000 head)¹							
Boars (> 6 months)	15.7	15.3	13.9	13.5	12.6	12.7	12.2
Sows and bred gilts	320.6	340.1	335.2	344.5	360.5	391.7	411.9
Pigs (under 20 kg)	944.2	1,057.3	1,037.2	1,045.0	1,026.5	1106.6	1138.7
Pigs (20 to 60 kg)	990.2	1,106.9	1,081.2	1,141.2	1,163.5	1168.5	1029.4
Pigs (over 60 kg)	864.4	909.6	933.7	990.3	936.9	1013.6	1017.8
Total Pigs	3,135.1	3,429.2	3,401.2	3,534.5	3,500.0	3693.1	3610.0
Ontario Farms Reporting Pigs ¹	6,530	6,250	5,550	5,250	4,900	4,750	
OPPMB Producers ²	6 068	5 502	5 099	4 473	4 400	4 100	
OPPMB Market Hog Sales ²	3,815,521	4,376,490	4,700,121	4,563,045	4,747,442	5,058,108	
Average Pool Price (\$/100 kg, 100 index) ²	186.69	121.42	120.40	162.03	173.04	138.53	

1. October 1st. Livestock Statistics, Statistics Canada.

2. Ontario Pork.

Table 2. Calculated Pig Production in Ontario ('000 head)¹.

	1996	1997	1998	1999	2000	2001	2002
Pigs Processed within Canada²	3,582	3,455	4,030	4,841	4,771	4,944	5,291
Feeder Pig Exports	254	357	586	628	793	1,279	1,641
Market Pig Exports³	711	975	1,007	484	463	483	448
Total Pig Production	4,547	4,787	5,622	5,952	6,027	6,707	7,381
Pigs Produced per Sow ⁴	14.5	15.2	17.9	17.7	17.8	18.6	19.5

1. From "Ontario – Yearly Hog Market Facts" compiled by John Bancroft, OMAF. Sources: Statistics Canada; Agriculture and Agri-Food Canada. "Exports" means exported outside of Canada.
2. Includes market hogs, sows, and boars.
3. Includes market hogs, sows, boars, and breeding stock.
4. Pigs Produced per Sow = Total Pig Production divided by Number of Sows & Bred Gilts (adjusted for Inventory Change).

Issues Facing The Ontario Pork Industry (from the 2000 Strategic Report)

1. Opposition to pig farming from local residents

There has been a great deal of opposition to the construction of new facilities and a growing number of complaints regarding existing operations in many part of the province. The result of this opposition has been the introduction of more restrictive legislation and by-laws causing building delays or cancellation of expansion plans.

Contributing to this problem has been the shift in rural society from an active farming population to a non-farming majority. There are major concerns from non-pig farming residents that the building of a pig farm nearby will reduce property value, cause health risks with regard to water pollution, and create a nuisance because of odour. The media has done its best to fuel these concerns with misinformation and sensational stories.

There is a need for research into methods of handling pig manure to minimize risks of pollution and disease, as well as reducing odour. It is also important that guidelines or laws governing manure application and storage be based on sound scientific information and this will require more research.

This issue is certainly one of the most important problems facing the pork industry at this moment, but it is not likely to be solved by research alone. There is a huge education and public relations component to this issue.

2. Food safety and quality

All segments of the food industry are vulnerable to issues of safety. A single outbreak of food poisoning and the media attention it might receive can have a huge impact on an industry. The pork industry uses far more antibiotics, particularly in feed at subtherapeutic and growth promotant levels than any other livestock industry and is therefore vulnerable to criticism regarding residues in meat and the development of antibiotic resistant bacteria. The pork industry needs to be proactive with respect to antibiotic use and take steps to ensure that medications are used in an efficient and appropriate manner. The adoption of education and monitoring programs such as the Canadian Quality Assurance Program is a good start. Research is required to investigate methods which can lead to reduced antibiotic use, possibly by improving immunity or developing safe substitutes.

Another important safety or quality issue is contamination of pork with pathogenic or spoilage micro-organisms. Research is needed to determine the extent of, and the reasons for contamination and how these can be prevented. New organisms are being identified that could have potential zoonotic implications (for example, swine retroviruses, *Hepatitis E* virus, and *Helicobacter*). The control of, or elimination of, potentially pathogenic organisms from pigs prior to slaughter needs to be investigated. Some countries have initiated programs, for instance, to eradicate *Salmonella typhimurium* from farms. Ontario needs to investigate the potential benefits of such programs, and gain a better understanding of the pathogen risks associated with pork.

In the long run, the issue of meat quality with regard to flavour and tenderness is also very important. Methods to enhance shelf-life, minimize “off-putting” odours, and ensure freedom from quality problems like PSE will provide the Ontario pork industry with a significant advantage in the market place.

3. Production competitiveness

Ontario pork producers have some major advantages. Feed costs are relatively low. Pork production is primarily based on land which can produce corn and soybeans to feed the pigs. Ontario pig farmers also have the opportunity to utilize swine manure to off-set the costs of fertilization and are not faced with the severe manure disposal problems of many other areas. There is a relatively good labour pool and strong infrastructure to support pork production including a well organized feed industry and packing industry.

However, farm size is relatively small compared to all other pork producing regions in North America and many facilities are old and outdated. For the Ontario producers to stay competitive it is essential that productivity be very good. Therefore, research into achieving high prolificacy in the sow herd and fast efficient growth rate in the grower-finisher barn is essential for the continued success of the Ontario pork industry.

It is possible that the application of biotechnology might rapidly change pig performance. Ontario producers need to be positioned to take advantage of new innovations and technologies. Support for research in the area of transgenics and other biotechnologies is

essential in order to be in position to use these technologies when general public acceptance is gained.

4. The well-being of animals raised on large modern farms and the handling of these animals through to slaughter

Most media stories related to pig farming use the undefined and inflammatory term “factory farming”: to describe a modern pig farm, even when the writer is trying to give the impression of impartiality or fairness. There is a need to evaluate the various management and housing systems with respect to animal well-being to ensure pigs are being humanely treated and develop new systems to improve animal comfort where possible. There is also a need to conduct such research so that if the public demands legislative changes to farming practices, these regulations can be based on scientific information rather than emotion.

Behavioural problems do impose constraints on productivity and there is a need for research into animal behavior; for example, to improve feed intake of newly weaned pigs, or to reduce boar breeding problems at A.I. studs. There is also a need to better understand what causes pig “vices” such as tail-biting and ear-biting and how these problems can be prevented or controlled. There is also a need to improve the handling of pigs during transport and slaughter.

Emerging Issues

The following issues were raised in meetings held with a number of industry groups. An attempt has been made to synthesise the many comments and group them according to the existing general issues headings. Many issues raised related directly to the Issues from the 2000 Strategic Report; where possible these have not been reiterated but their continued importance has been noted.

Competitive Production Issues

In 2002, live exports amounted to over 28% of pig production - this is mainly due to the extent of feeder pig exports. Taken together with our exports of pork products, this indicates the value of the export market to the Ontario industry. In an industry with great dependence on export markets, international competitiveness and border access are always critical. Foreign animal disease threats, fear of zoonoses and other food safety risks, and the US Country of Origin Labelling policy are principal issues at this time. Restrictions to the availability of medicines used in production, or increased costs of acquiring or using these products, raise concerns about competitiveness of production in Ontario. Product traceability will likely be an upcoming competitive and potentially regulatory issue. Carcass grading and compensation relative to product value, and price determination are issues growing in importance, and are related to developing fairness in the value chain.

There are numerous issues around the economic impact of regulations or policy on Ontario’s pork industry, particularly the US Country of Origin Labelling policy and potential regulations related to traceability, animal welfare, environment (e.g. the Nutrient Management Act), feed regulations or restrictions (e.g. meat and bone meal, phosphorous levels required in feed) and drug restrictions

(antibiotics, requirements for prescriptions), or access to technology (e.g. Paylean) available to competitors. The costs of production related to these issues would have bearing on the viability of the pork industry by affecting profitability and international competitiveness.

Nutrient Management Planning requirements raise a number of issues. Primarily, feed formulations or feed additives to reduce nutrient outputs in manure are needed. Improved understanding of the mass balances of nutrients in full scale production units is needed. Strategies are needed to meet the challenges of phosphorous loading on the land base, in particular.

The global competitiveness of the industry may be challenged by the growth of new production areas with favourable costs of production and other (possible) advantages (e.g. in South America). Meanwhile, public support for agriculture in Ontario appears to be waning, and the land base available for agriculture generally appears threatened by urban sprawl and other industrial use.

The involvement of the retail sector in determining production standards (i.e. welfare) and slaughter procedures in the US is an emerging issue.

Accurate and useable benchmarking of production parameters is necessary to ensure that producers have the means to make good business decisions. Producers need to be encouraged to make use of available benchmarks.

Safety Issues

There is a need for research regarding working conditions for employees in agricultural operations, in order to ensure their health and well-being. New technology is coming available to provide detection and warning of hazardous gases. The applicability and availability of this technology to agricultural operations needs attention.

Animal Well-being Issues

Challenges arising from the group housing of dry sows include: the physical structure of group housing, group sizes, social dynamics such as aggressive and submissive behaviour, and feeding, etc.

There is a need for improved availability and training in methods of euthanasia that are both humane and safe.

Deadstock and Abattoir Waste Management Issues

A number of factors are creating issues in this area. There is a need for effective methods of on-farm management and disposal, for solutions to the problems currently facing the rendering industry, new/alternate systems for disposal or utilisation of these materials, etc.

Poultry

Executive Summary

The three poultry subcommittees met as one group for a full day meeting on September 17th, 2003 at the Kay House, Arkell. This meeting was directed by a facilitator, Dr. Bill Stevens and was the first meeting in preparation for the major four year Strategic Research Report(2005-2009) due in 2004. The objectives of the meeting were to identify and prioritize Poultry Industry emerging issues for this 2003 OARSC report and also to develop an action plan for the committee leading to the 2004 report of future research needs required to successfully move the industry forward over the next four years.

The following emerging issues are presented in order of priority to the feather industry in general as tabulated by votes cast by all sectors of the poultry industry. They are identified as either new issues recently of concern to the poultry industry or as subjects that have previously been presented as research or service issues priorities but require renewed research activity or redirected theme.

Therefore the following comments represent the consensus of the three poultry subcommittees, Broilers, Egg Layers and Turkey and are respectfully submitted by the three chairs: Dr. Rachel Ouckama, Dr. Peter Hunton and Diane Spratt.

Emerging Issues Report from the OARSCC Poultry Subcommittees

FOOD SAFETY ISSUES:

Food safety was the #1 priority in the Strategic Report of 200 and the 2001 Services Report. The theme again appeared as very high in the list of emerging issues.

- 1) Development of alternatives to sub therapeutic Anti- Microbials.
This is a continued need both in terms of promoting gut health while promoting growth characteristics and providing effective prevention of such enteric diseases as necrotic enteritis to allow efficient production, reduce risk of disease and meet society's growing demand for reduction or elimination of antimicrobial use and risk of resistance development.
- 2) Pathogen reduction in the live bird; impact on end products; scientific proof of on farm HACCP GMP effectiveness.
Although noted before on the priority list, there is a marked lack of research in live poultry specifically addressing these topics. The live segment of the industry continues to be badly in need of new and scientifically proven methods of true control of bacterial pathogens of significant to food safety. Scientific risk assessments are needed for the entire industry coupled with verification data to determine the impact of enhanced control measures through HACCP programs. This would enable the development of cost/benefit analysis and provide a level of proof of the benefits of

HACCP, particularly at the farm level. There are large gaps in our ability to perform quantitative assessment of the risk that the isolation of such potential pathogens a *S. enteritidis* and *S. typhimurium* DT104 pose to components of the production chain.

- 3) Traceability and identity preservation through growing, production and processing chain, including the status of feed ingredients fed. (GMO, meat meal, chemicals and antibiotics) New issue.

This can be done with accuracy in the poultry industry in terms of a days process production but cannot be done in the present system for a single farm, barn or individual or include the feed aspects. With increasing consumer demands internationally for quality assurance, accountability, new certification programs and export restrictions, there is a need for the development of innovative methods of identity preservation in the poultry industry and economic impact studies on the benefits of this for the industry growth/ survival.

ENVIRONMENTAL ISSUES:

Environmental issues were priority #3 in 2000 Strategic report but recent events and legislative changes have produced increasing demands.

- 4) Dead bird disposal and offal disposal: develop large scale systems for disposal (including euthanasia methods and disposal in Emergency Disease related welfare slaughter) and new uses for poultry by products.

With BSE impact and subsequent reduction in use of rendered products including, by association, poultry by products as a feed ingredient, and with environmental concerns/ possible restrictions regarding burial, incineration and spreading of composted mortality, alternative methods of disposal or alternative uses for by products need to be found to lessen impact on environment and provide some cost recovery to the poultry industry.

- 5) Poultry feeds: changing ingredients based on the BSE impact; revise ingredient values in poultry rations and find means of reducing impact on environment through manure (nutrient management).

Consumer perceptions may force strictly vegetable based formulations, producing new challenges in nutrition, conversion efficiency and manure output. Many of the ingredient values and nutrient requirements for poultry are now outdated or have been replaced with newer genetic lines both on the grain and bird side. Accurately knowing the ingredient value, digestibility, use/effect of feed utilization additive and thus manure output is essential to move forward with increased environmental responsibility as an industry.

“DESIGNER” PRODUCT DEVELOPMENT:

Exploring the development of innovative poultry products through manipulation of genetics or feeding regimes at the live bird level is not a new concept to egg production but needs to be expanded to the other poultry products. As mentioned in the food safety

points above, there also needs to be a better link, scientifically proven, between live bird production programs and qualities of end product to consumer.

- 6) Develop mechanism to relate “live bird production” with end product features. This could be in reference to inclusion of “health additives” (eg. omega 3 fatty acids, vitamin analogues.) or in reference to improved quality/ uniformity/ shelf life of end product.
- 7) Exploit genetic diversity as it applies to end product characteristics such as taste and texture in order to exploit value added ethnic markets domestic and export.
- 8) Deal with genetic limits to selection. Industry realizes that it will soon “hit the wall” in terms of yield growth and feed conversion rate improvement potential.

ECONOMIC IMPACT STUDIES:(new)

Identify the factors and decision support systems that impact on profitability for the industry. Industry’s strategic decisions that affect long term viability must be made with the knowledge of biological and economical sustainability and economic consequences of their actions.

Subject areas of main concern for Economic Impact studies are:

- 9) Concentrated animal feeding operations,
- 10) Alternate agricultural policies in response to vulnerability of Canadian poultry industry (limited genetic pool, foreign sources),
- 11) Public perception of welfare (emotional vs science based facts) as potential barrier to expansion or trade,
- 12) Supply management sustainability and quota value impacts.

ACTION PLAN in preparation for 2004 REPORT:

Present membership represents a wide cross section of the industry and primary processors. Build on these strengths and make the effort to expand the membership to include sections of affiliated industry such as live-haul, catching, primary breeding companies and economics (banking perhaps).

Committee members make additional effort to publicize and increase visibility by:

1. Report to Board of directors of Commodity Boards and Supplier organizations
2. Publish synopsis of Committee activities in Board and association newsletters
3. Survey memberships of Boards and Associations for input to deliberations of the committee.
4. Seek opportunities to make presentations at Board and Association meetings.
5. Produce PIC Factsheet on Committee activities, the report and timelines (to be mailed to industry members by Poultry Industry Council) and place on PIC website.
6. Establish communication with OARSC Food Committee (further processing) re. relationship of on farm production and poultry food products.

TIMELINE:

December 31, 2003: PIC Factsheet, PIC website.
March 31, 2004: Board & Assoc. meetings (recommended)
May 2004 : Turkey, Chicken and Egg subcommittee initial meeting to
prioritize research needs.
June 2004 Turkey, Chicken and Egg subcommittee meet together, then
separately to finalize strategic report.
September 1, 2004 Subcommittee strategic Reports submitted to OARSCC.
September 30, 2004 Annual Meeting OARSCC Committee chairs.
November 1, 2004 OARSCC Strategic Reports, all animal committees provided to
University of Guelph.

Sheep

Executive Summary

Ontario's sheep industry continues to show strong growth in terms of livestock numbers, and is the nation's leader with regards to meat processing capacity and its role within the Canadian sheep and lamb industry as a breeding flock. Emerging issues for this industry largely relate to a lack of infrastructure for such a bullish industry or the impacts of policy and trade. The 2003 Sheep subcommittee divided the emerging issues so that they fell into one of two categories; Threats or Opportunities/Weaknesses to reflect the nature of the challenge as being one that threatened the current industry, or whether it was an issue that might stifle future growth.

Identified **threats** included;

- Risks to domestic market access
- Lack of national co-ordination on Scrapie eradication
- Lack of viable deadstock & offal strategies
- Declining access to animal health products
- Agricultural policy impacts

Emerging issues categorised as **weaknesses offering opportunity** consisted of;

- Traceability
- Predicting true carcass value
- Production system challenges
- Consumer issues

Additionally, the committee discussed the potential changes to the infrastructure and funding of public livestock research. It was felt that although the proposed funding mechanisms offered opportunity, the sheep industry must be wary to ensure its goals are not engulfed or superseded by the research motives of more established livestock commodities.

State of the Industry

(Adapted from 2003 State of the Industry – Anita O'Brien, OMAF)

Ontario's breeding flock has increased by 76.5% since July 1, 1998. The July 1st 2003 inventory indicated that Ontario's total flock size has increased by 5.4 percent - to 353 thousand head compared to the July 2002 flock size of 335 thousand head. Ontario has the largest portion of the national breeding flock at 28.8 percent, which represents 231 thousand head of ewes, rams and replacement lambs. This represents a 5.3 percent increase in the past year.

Volume of sheep and lambs sold through Ontario's 14 major markets in 2002, at 192,712 head was 23.2 percent greater than 2001's volume of 156,390 head. These live sales of sheep and lambs through auction markets represented 81.5% of the sheep and lambs slaughtered in Ontario plants (federal and provincial).

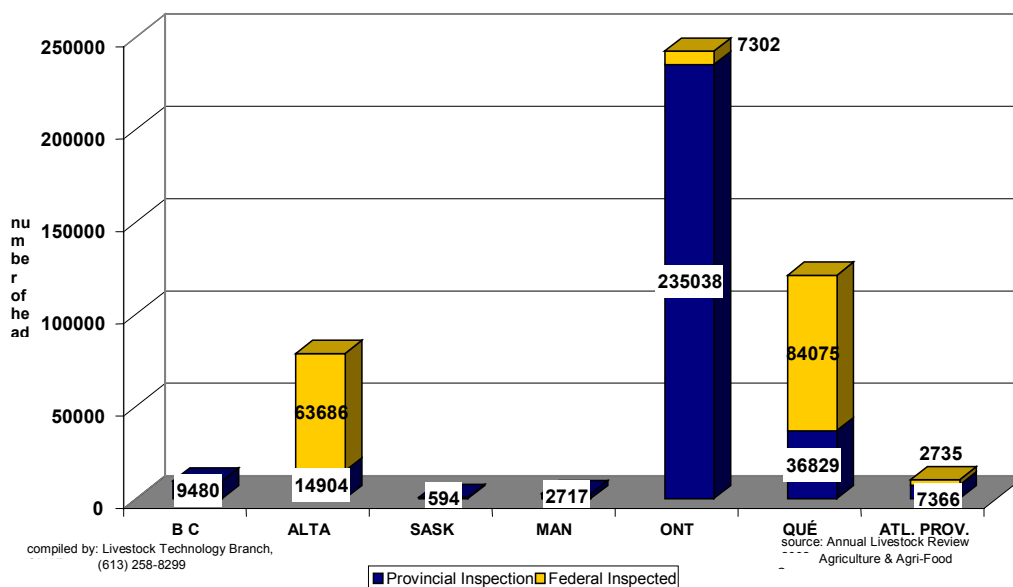
Ontario continues to have the nation's largest combined slaughter, accounting for 52 percent of all sheep and lambs slaughtered in Canada, while Quebec makes up 26 percent, the western provinces 20 percent and the Atlantic provinces, 2 percent

of the total sheep and lamb slaughter. Federally inspected slaughter can be sold throughout other provinces in Canada and exported to international markets. Of the total sheep and lambs slaughtered in Canada in 2002, only 34 percent was federally inspected. The rest is from provincial plants, meaning it can only be sold within the province it was slaughtered in. This is a decline from 45 percent federal slaughter in 1997.

Ontario's federally inspected slaughter in 2002 (7,302 head) accounted for only 3 percent of the total sheep and lamb slaughter in the province, down from 16 percent in 1997. This compares to 70 percent of Quebec and the western province's slaughter being federally inspected in 2002. Ontario's average carcass weight was 46 pounds in 2002 compared to 44.1 pounds in 2001.

The impact of the discovery of BSE in one cow, reported May 20th, 2003, on lamb market prices, did not appear to be immediate, but was evident by mid July. Typically, prices for most lamb categories begin to fall during April – May period, and start to recover in September – October period. In 2003, average prices for lambs in the 80 –94 lb. category dropped steadily through August, with August's monthly average price lower than that in 2001. In the 95 –109 lb. category, prices dropped below 2001's in week 30 and have remained below 2001 average prices to date. In the +110 lb. category, along with lower prices, volumes were 130 % higher, for the period May- August 2003, compared to the same period last year (2284 head vs. 993 head).

2002 Sheep & Lamb Slaughter, by inspection



Activities since the 2002 Annual Report

Recommendations arising from the Committee's 2002 report were forwarded to all organisations or individuals that were identified as being the targets of those recommendations. Of note, some of the agricultural lenders that were targeted with the recommendation concerning 'Access to capital-Lender Cultivation & Flock Business Plan Development' have entered discussions with OSMA & OMAF staff in an effort to improve the relationships between banks and farm businesses.

Emerging Issues for the Ontario Sheep Industry

The emerging issues for the sheep industry have been divided into two categories – 'Threats' and 'Weaknesses/Opportunities'. Threats are issues that might affect the viability or stability of the existing industry in the future. Weaknesses and opportunities are issues that relate to the industry's ability to grow and move forward from the status quo.

Threats

1. **Risks to domestic market access** – a number of issues have arisen that impact the ability of Ontario shepherds and processors to get their product to Ontario and other Canadian consumers. Most recently, the major grocers have increasingly refused to stock provincially inspected lamb in their meat counters, and have demanded federally inspected product or the equivalent imports. In Ontario, only about 3% of the lamb kill is federally inspected, and as a result there is a massive disjoint between production and consumption, not resulting from supply and demand, rather as a consequence of the jurisdiction of inspection under which the highly demanded product is processed. These same national grocery chains are the only avenue to access the larger-scale Canadian market, so the issue of how to get lamb back into these stores must be addressed in a timely manner. Another issue is the inability of on-farm sheep milk processors to become licensed due to regulation that is cumbersome, and sometimes appearing contradictory.
2. **Lack of national coordination on scrapie (and other disease) eradication** – The lamb industry lacks the ability to secure national approaches to such issues as disease eradication programs, and the ability to secure unfettered access to international markets. A strong nationwide approach would consider international conditions, and ensure the long-term benefit of the industry that is impossible with regional or voluntary programs. Of particular concern is the growing gap between US and Canadian approaches.
3. **Lack of viable deadstock & offal strategies** – The lack of options for deadstock and offal disposal have increasingly become troublesome for the

industry, especially since the BSE related border closures and the related concerns over Scrapie.

4. **Declining access to animal health products** – the sheep industry continues to suffer from restrictive pharmaceutical policies and a lack of approved veterinary drugs to improve animal welfare and production. As fallout of the anti-microbial resistance (AMR) phenomenon in humans and other livestock, it is anticipated that only on-label use of pharmaceuticals will be advocated. For the sheep industry, which relies on veterinarian-approved, extra-label use, all pharmaceutical use may become more difficult. In fact this may accelerate AMR in sheep pathogens because the few on-label products would then be used universally.
More antibiotic and antihelminthic products require licensing for sheep in Canada, with more consideration given to foreign research in the approval process to allow for appropriate sheep health care.
5. **Agricultural policy impacts** – Because the sheep industry is poorly positioned to pass on increased production costs associated with various agricultural policy. The industry is still unsure of the impacts of foreign agricultural policy such as Country of Origin Labeling (COOL), or impending domestic policies such as the Agricultural Policy Framework (APF) particularly on day to day production. Of greatest interest, is how APF will or will not assist in the ‘down-loading’ of cost to producers for programs such as On-Farm Food Safety (OFFS) and greenhouse gas mitigation programs such as carbon sequestration. Another concern of the larger industry is the future of New Zealand and Australian imports into Canada. This concern is on account of how US policy may divert NZ and Australian lamb, while Canada has no quotas or limitations associated with that product.

Weaknesses & Opportunities

1. **Traceability** – the need for complete traceability has increased for the industry. In addition to the impending National Identification strategy which would identify flock of origin, a complete system is required to facilitate source and age verification for lamb retailing. This would require a system that allows each producer that owns or manages a particular sheep access to its records of movement, presumably with an electronic tag.
2. **Production system challenges** - over the last one to two years Ontario producers that had been adhering to the Five Star accelerated systems (5 lambing groups per year, each ewe lambing 5 times in 3 years) have been modifying or abandoning that system. This is mostly on account of the poor return on labour with regards to especially the August/September out-of-season lambing. The result has been that producers are increasingly adopting ‘3 in 2’ systems, or modified Five Star programs, which have lower theoretical productivity. A number of phenomena have been implicated in this poor out-of-

season lambing, and the resulting longer lambing intervals. Specifically, increased resistance to bio-pharmaceuticals, nutrition issues, insufficient ram to ewe ratios and management have been cited with no conclusions drawn. Producers are struggling with various problems that are limiting the number of lambs marketed per breeding event. Namely, these are embryo, fetal and lamb mortality, each of which can stem from disease, nutritional or management problems. Regardless of the phase in which the offspring is lost or the etiology, the net result is that there are fewer marketable lambs than desired in all production systems.

Also, the need to make decisions on which are the most appropriate production systems for Ontario, continues to demonstrate itself. This is in regards to everything from housing and management, to feeding and genetics, and how the best answers might be crafted into production ‘recipes’.

3. **Predicting true carcass value** – Ontario has no adequate system for predicting carcass cutouts and associated value from whole carcasses. This limitation must be addressed for both the purpose of creating domestic value chains, improving the potential for harvesting flock improvement data and improving export of boneless lamb.
4. **Consumer issues** – a host of consumer issues will increasingly come to impact Ontario lamb and sheep milk producers. Specifically, these are the demand for specialized products such as Organic and designer product (eg high CLA or omega 3 lamb), increased demand for locally grown products, and concern for animal welfare issues.

Research Issues

The future of the OMAF/University of Guelph research funding arrangement received a mixed evaluation from the Committee. Although the possibilities for more operating money and competitive research from any institution equipped and willing to address a research priority are attractive, the risks to small programs such as the University of Guelph’s sheep research program are considerable. The committee is concerned that with no ‘guaranteed funding’ to a particular species, the dollars will be drawn into the more prominent commodities such as poultry, swine and dairy.

Ontario Animal Research and Services Committee Members

ONTARIO ANIMAL RESEARCH AND SERVICES COMMITTEE (2003)

Mr. Rick Norkooli OARSC Co - Chair Livestock Technology, OMAFRA 1 Stone Road West Guelph, Ontario N1G 4Y2 (519)826-3291 Fax: (519)826-3567 email: rick.norkooli@omafra.gov.on.ca	Dr. John Walton OARSC Co-Chair Department of Animal and Poultry Science University of Guelph Guelph, Ontario N1G 2W1 (519)824-4120 ext. 53706 Fax: email: jswalton@uoguelph.ca	Dr. Roger Hacker Animal Research Program Leader Animal & Poultry Science University of Guelph Room 246, Animal Science & Nutrition Bldg. Guelph, Ontario N1G 2W1 (519)824-4120 ext.3648/3677 Fax: (519)836-9873 email: rhacker@aps.uoguelph.ca
Ms. Katherine Hoffman, Research Analyst, OMAFRA 1 Stone Road West 4NW Guelph, Ontario N1G 4Y2 (519)826-4183 Fax: (519)826-4211 email: katherine.hoffman@omafra.gov.on.ca	Dr. Ann Gibbins, Chair, Dept. of Animal and Poultry Science University of Guelph Guelph, Ontario N1G 2W1 (519)824-4120 ext. 52251 Fax: (519)837-8867 email: agibbins@uoguelph.ca	Mr. Dave Battenham, CEO. Agri Business Association 160 Research Lane Suite 104 Guelph, Ontario N1G 5B2 (519)822-3004 Fax: (519)822-8862 email: dave@oaba.on.ca
Dr. Grant Maxie, Manager Animal Health Laboratory University of Guelph Building 49, OVC Guelph, Ontario N1G 2W1 (519)824-4120 ext.4544 Fax: (519)821-8072 email: gmaxie@lsd.uoguelph.ca	Dr. Doug Raven Ontario Veterinary Medical Association 245 Commercial Street Milton, Ontario L9T 2J3 (905)875-0756 Fax: (905)875-0958 email: draven@ovma.org	Mr. Bruce Christie, Chair Ontario Farm Animal Council 7195 Millcreek Drive Mississauga, Ontario L5N 4H1 (905)821-3880 Fax: (519)858-1589 email: ofac@idirect.com
Dr. Jacques Surprenant Dairy and Swine Research and Development Centre Agriculture and Agri-Food Canada P.O. Box 90, 2000 Route 108 East Lennoxville, Quebec J1M 1Z3 (819)565-9174 ext.101 Fax: (819)564-4974 Email: surprenantj@agr.gc.ca	Mr. Dave Armitage Ontario Federation of Agriculture 40 Eglinton Ave., East, 5 th Floor Toronto, Ontario M4P 3A2 (416)485-3333 Fax: (416)485-9027 email: david.armitage@ofa.on.ca	Mr. Andrew Adams, Director Animal Diseases Research Institute Canadian Food Inspection Agency 3851 Fallowfield Road Nepean, Ontario K2H 8P9 (613)228-6698 ext. 4899 Fax: (613)228-6660 email: adamsa@em.agr.ca
Ms. Jean Szkotnicki, President Canadian Animal Health Institute 160 Research Lane Guelph, Ontario N1G 5B2 (519)763-7777 Fax: (519)763-7407 email: jszk@cahi-icsa.ca	Dr. S.K. Ho, Animal Research Coordinator Research Branch Sir John Carling Building, 7 th Floor Ottawa, Ontario K1A 0C5 (613)759-7853 Fax: (613)759-7769 email: hosk@em.agr.ca	Mr. Bob Down Ontario Corn Producer's Association R. R. #1 Hensall, Ontario N0M 1Y0 (519)235-2557 Fax: (519) 235-0334 Email: bobdown@quadro.net

ONTARIO ANIMAL RESEARCH AND SERVICES COMMITTEE (2003)

SUB-COMMITTEE CHAIRS

AQUACULTURE: (co-chair) Mr. Alvis Fogels Springhills Trout Farm R.R. #1 Holland Centre, Ontario N0H 1R0 (519)794-3760 Fax: (519)794-3440 Email: alvis.fogels@sympatico.ca	DAIRY: (co-chair) Mr. Brian Lang Dairy Technology Transfer & Planning Specialist OMAF Box 666, Hwy #59 North Woodstock, Ontario N4S 7Z5 (519) 537-8786 Fax: (519)539-5351 Email: brian.lang@omaf.gov.on.ca	DAIRY: (co-chair) Mr. Hans Vink R.R. #2 Norwood, Ontario K0L 2V0 (705)696-2169 Fax: (705)696-1427 Email: vinkfarms@heydon.com
AQUACULTURE: (co-chair) Mr. Rich Moccia Department of Animal & Poultry Science University of Guelph Guelph, Ontario N1G 2W1 (519)824-4120 Ext. 6216 Email: rmoccia@uoguelph.ca	DEER: Dr. John Pollard Therion Research R.R. #1 Guelph, Ontario N1H 6H7 (519)763-2085 Fax: ????? Email: therionresearch@hotmail.com	GOATS: Ms. Anita O'Brien Sheep & Goat Specialist OMAF ORC Government Building Box 2004 Kemptville, Ontario K0G 1J0 (613)258-8299 Fax: (613)258-8392 Email: anita.obrien@omaf.gov.on.ca
BEEF: interim chair Mr. Tom Hamilton Production Systems Program Lead OMAF Hwy 11 B N Box G New Liskeard, Ontario P0J 1P0 (705) 647-6701 Fax: (705)647-7993 Email: tom.hamilton@omaf.gov.on.ca	EGG LAYERS: Dr. Peter Hunton R.R. #4 Stn. Galt Cambridge, Ontario N1R 5S5 (519)622-3714 Email: phunton@sympatico.ca	PORK: Dr. Jaydee Smith Swine Production Systems OMAF Ridgetown College P.O. Box 400 Ridgetown, Ontario N0P 2C0 (519)674-1542 Fax: (519)674-1564 Email: jaydee.smith@omaf.gov.on.ca
BEEF: (co-chair) Mr. Mike McMorris Assistant Manager Ontario Cattlemen's Association 130 Malcolm Road Guelph, Ontario N1K 1B1 (519) 824-0334 Fax (519) 824-9101 Email: mike@cattle.guelph.on.ca	EQUINE: Dr. Mike Corradini Tottenham Animal Clinic 4 Mill Street East Tottenham, Ontario L0G 1W0 (905) 936-3131 Fax: (905) 936-3530 Email: corradini@accglobal.net	SHEEP: Mr. Christoph Wand Beef Cattle and Sheep Nutritionist OMAF Box 666, Hwy 59N Woodstock, Ontario (519)537-6621 Fax: (519)539-5351 Email: christoph.wand@omaf.gov.on.ca
BROILERS: Dr. Rachel Ouckama Curtis Chicks Ltd. R. R. #1 Port Hope, Ontario L1A 3V5 (905)885-6337 Fax: (905)885-2304 Email: ccl@eagle.ca	FUR-BEARING: Mr. Brian Tapscott Alternative Livestock Specialist OMAF Wellington Place, R. R. #1 Fergus, Ontario N1M 2W3 (519)846-3400 Fax: (519)846-8178 Email: brian.tapscott@omaf.gov.on.ca	TURKEYS: Mrs. Diane Spratt Poultry Specialist, OMAF Dept. of Pathobiology University of Guelph Room 2156, OVC Guelph, Ontario N1G 2W1 (519)824-4120 ext. 4326 Fax: (519)824-5930 Email: diane.spratt@omaf.gov.on.ca

Subcommittee Memberships

Aquaculture Subcommittee Membership (2003)

Richard Bray (OAA)
Cedar Crest Trout Farm
Box 354
273 Main St. South
Mount Forest, Ont. N0G 2L0
Tel.: (519) 323-9887
Fax: (519) 364-3769
E-mail: jim_taylor@wightman.ca

Alvis Fogels (OAA) Co-chair
Springhills Trout Farm
R. R. 1
Holland Centre, Ont. N0H 1R0
Tel.: (519) 794-3760
Fax: (519) 794-3440
E-mail: alvis.fogels@sympatico.ca

Dan Glofcheskie (OAA)
North Wind Fisheries Ltd.
367 Parchment Avenue
Espanola, Ont. P5E 1C6
Tel.: (705) 869-5102
Fax: (705) 869-2498
E-mail: norwin@cyberbeach.net

Tom Johnston (DFO)
Great Lakes Laboratory for Fisheries
And Aquatic Sciences,
867 Lakeshore Road,
Burlington, Ont. L7R 4A6
Tel.: (905) 336-6231
Fax: (905) 336-6437
E-mail: johnstont@dfo-mpo.gc.ca

Richard D. Moccia (UG) Co-chair
Aquaculture Centre
Dept. of Animal & Poultry Sciences
University of Guelph
Guelph, Ont. N1G 2W1
Tel.: (519) 824-4120 ext. 6216
Fax: (519) 767-0573
E-mail: rmoccia@uoguelph.ca

Rod Penney (OMNR)
Ontario Ministry of Natural Resources
Fish Culture Section, Fish and Wildlife Branch
300 Water St.
Peterborough, Ont. K9J 8M5
Tel.: (705) 755-1928
Fax: (705) 755-1957
E-mail: rod.penney@mnr.gov.on.ca

Steve Naylor (OMAF)
Ont. Ministry of Agriculture and Food
1 Stone Road W. 3NE
Guelph, Ont. N1G 4Y2
Tel.: (519) 826-3172
Fax: (519) 826-3259
E-mail: steve.naylor@omaf.gov.on.ca

Roz Stevenson (UG)
Fish Disease Laboratory
Dept. of Microbiology
University of Guelph
Guelph, Ont. N1G 2W1
Tel.: (519) 824-4120 ext. 3577
Fax: (519) 837-1802
E-mail: rstevens@uoguelph.ca

Mark Wagner
Martin Mills Inc
R. R. #1
Belwood, Ont. N0B 1J0
Tel.: (519) 843-4091
Fax: (519) 669-5982
E-mail: mwagner@sentex.net

Legend:

DFO	Fisheries and Oceans Canada
OAA	Ontario Aquaculture Association
OMAF	Ont. Min of Agriculture and Food
OME	Ontario Ministry of Environment
OMNR	Ontario Ministry of Natural Resources
UG	University of Guelph

Beef Subcommittee Membership (2003)

Name	Fax	Phone	Email	Address 1	Address 2
Larry Chanda	519-582-2174	519-582-1519	judelar@oxford.net	RR 1	Simcoe, ON N3Y 4J9
Ira Mandell	767-0573	824-4120 ext.3337	imandell@aps.uoguelph.ca	University of Guelph	Guelph, ON N1G 2W1
Andi Owen	824-9101	824-2942	aowen@ontarioveal.on.ca	130 Malcolm Rd.	Guelph, ON N1K 1B1
Phil McEwen	519-674-1555	519-674-1541	pmcewan@ridgetwonc.uoguelph.ca	Ridgetown College	Ridgetown, ON N0P 2C0
Ken Bridge	519-395-4222			RR 4	Ripley, ON N0G 2R0
Christoph Wand	519-539-5351	519-537-8422	cwand@omaf.gov.on.ca	Hwy 59 N. PO Box 666	Woodstock, ON N4S 7Z5
Jennifer Haley			Ontario Veal		
Jim Clark	824-1583	824-0902		130 Malcolm Rd.	Guelph, ON N1K 1B1
Crosby Devitt			BIO		
Richard Heleniak	519-468-2050				
Dr. Rob Tremblay	905-681-0194				
Dr. Steve Miller	767-0573	824-4120 ext. 6378	miller@uoguelph.ca		
Beny Dejonge	823-5451	823-5200		781 York Rd.	Guelph, ON N1H 6P3
Dan Ganesh Ontario Agri Business Association	519-622-0960		dganesh@easynet.ca	c/o New Life Mills 1400 Bishop St. Suite 201	Cambridge, ON N1R 6W8
Barb Kalow	613-228-6612	613-225-2342 ext. 4238	kalowb@inspection.gc.ca	Camelot Court 59 Camelot Dr.	Guelph, ON K1A 0Y9
Dr. Scott McEwen	763-3117	824-4120 ext.4751	smcewan@ovc.uoguelph.ca	OVC, University of Guelph	Guelph, ON N1G 2W1
Tom Hamilton	705-647-7993	705-647-2087	tom.hamilton@omaf.gov.on.ca	280 Armstrong St. Box 4070	New Liskeard, ON P0J 1P0
Mike McMorris	519-824-9101	519-824-0334	mike@cattle.guelph.on.ca/	130 Malcolm Road	Guelph, ON N1K 1B1
Katherine Hoffman OMAF Liason					

Dairy Subcommittee Membership (2003)

Name	Organization	Address	Telephone	Fax No.	E-Mail	Term
Dr. John DEVENISH	Canadian Food Inspection Agency	3851 Fallowfield Rd. Box 11300 Stn. H, Nepean, ON K2H 8P9	613-228-6698 ext. 4857	(613) 228-6669	jdevenish@em.agr.ca	2006
Mr. Leo BRISSON	Dairy Farmers of Ontario	47 St.Jean Baptiste, C.P 1205 Emburn, ON K0A 1W0	613-443-2372	613-443-3640	brisson@netrover.com	2006
Dr. Hélène PETIT	Lennoxville Dairy & Swine Research & Development Ctr	C.P. 90, 2000 Route Est. Lennoxville, P.Q. J1M 1Z3	819-565-9174 ext.210	819-564-5507	petith@agr.gc.ca	2006
Dr. Ann GODKIN	Ont. Ministry of Agriculture and Food	Veterinary Science 2 nd Floor Wellington Place, RR #1 Fergus, ON N1M 2W3	519-846-3409	519-846-8101	ann.godkin@omaf.gov.on.ca	2003
Dr. Tim HENSHAW	Gencor (Artificial Insem. Industry)	Box 110 Minesing, ON L0L 1Y0	705-737-5919	705-737-4295	thenshaw@sympatico.ca	2003
Mr. Harold HOUSE	Ont. Ministry of Agriculture and Food	Box 159, 100 Don Street Clinton, ON N0M 1L0	519-482-1488	519-482-5031	harold.house@omaf.gov.on.ca	2006
Mr. Brian LANG	Ont. Ministry of Agriculture and Food Committee Co-chair	Box 666, Hwy 59 North, Woodstock, ON N4S 7Z5	519-537-8786	519-539-5351	brian.lang@omaf.gov.on.ca	2005
Dr. Ken LESLIE	Ont. Veterinary College	University of Guelph Guelph, ON N1G 2W1	519-824-4120 ext.4035	519-763-8621	keleslie@ovc.uoguelph.ca	2006
Dr. Paul SHARPE	Kemptville College	Kemptville College, U of G Box 2003, Kemptville ON K0G 1J0	613-258-8336 ext. 448	(613)258-8401	psharpe@kemptvillec.uoguelph.ca	2006
Dr. Clare RENNIE	Semex Canada Inc.	130 Stone Road Guelph, ON N1G 3Z3	519-821-5060	519-821-7225	crennie@semex.com	2003
Mr. Hans VINK	Dairy Farmers of Ontario Committee Co-chair	R.R. #2 Norwood, ON K0L 2V0	705-696-2169	705-696-1427	vinkfarms@heydon.com	2005
Dr. Vern OSBOURNE	Dept. of Animal & Poultry Science	University of Guelph Guelph, ON N1G 2W1	519-824-4120 ext.53691	519-836-9873	vosborne@uoguelph.ca	2006
Mr. Bob KERR	Ont. Large Herd Operators	c/o R.R. #2 Acton, ON L7J 2L8	519-853-0138	519-853-1428	prkerr@aztec-net.com	2003

Dr. Dan GANESH	Ontario Grain & Feed Dealers Association	160 Research Lane, Unit 104 Guelph, ON N1G 5B2	519-622-2090	519-622-0960	dganesh@easynet.ca	2003
Mr. John BONGERS	Ontario DHI	RR2 Elgin, ON N1K 1E5	613-926-2869	613-928-2869	bongersdale@ripnet.com	2006

Deer and Elk Subcommittee Membership

Name	Address
Dr. John Pollard	Chairman/Elk Producer R.R. #5, Guelph, Ontario N1H 6J2 Phone: (519) 763-2085
Brian Tapscott	Alternative Livestock Specialist Ontario Ministry of Agriculture and Food Wellington Place, R.R. #1, Fergus, Ontario N1M 2W3 Phone: (519) 846-3400
Dennis Schmidt	Elk Producer/ CCC Representative R.R. #2, J Side Road, Tiverton, Ontario N0G 2T0 Phone: (519) 368-7668
Wayne Saunders	Red Deer and Elk Producer R.R. #3, Rockwood, Ontario N0B 2K0 Phone: (519) 856-9023
John Rietkerk	Past-President OEBA/Elk Producer R.R. #3, Rockwood, Ontario N0B 2K0 Phone: (519) 856-9023
Stephan Yantzi	President, Ontario Whitetailed Deer Producers Association R.R. #2, 1467 Wilmot Centre New Hamburg, Ontario N0B 2G0 Phone: (519) 634-5822

Equine Subcommittee Membership (2003)

Contact Name	Contact Information	Organization	Term
Dr. Keith Betteridge	Biomedical Science University of Guelph Guelph, ON N1G 2W1 Tel: 519-824-4120 x 58258 Fax: 519-767-1450 Email: ahahnel@ovc.uoguelph.ca Kbetter@uoguelph.ca	Research Reproduction	2003
Dr. John Burton	Animal & Poultry Science University of Guelph Guelph, ON N1G 2W1 Tel: 519-824-4120 x 53680 Fax: 519-836-9873 Email: jburt@uoguelph.ca	Research – Nutrition	2003
Ken Armstrong	Equine Research Centre Guelph, ON N1H 6R8 Tel: 519-837-0061 Fax: 519-767-1081	Interim Director, ERC	2004
Dr. Mike Corradini (Chair)	Bradford Animal Clinic 35 John Street West, Box 1006 Bradford, ON L3Z 2B4 Tel: 905-775-5565 Fax: 905-775-8240 Email: corradini@accglobal.net	Ontario Equine Practitioners	2004
Dr. James Henderson	R.R. #1 Inglewood, ON L0N 1K0 Tel: 905-459-1333 Fax: 905-838-3687	Industry-Pleasure & Quarter Horse, Equine Practitioner	2000
Virginia Buchanan-Smith	Pitcaple Farm R.R. #22 Cambridge, ON N3C 2V4 Tel: 519-822-1859 Email: pitcaple@attcanada.ca	Industry-Hunter, Jumper International Competitor	2004
Simon Cassidy	c/o Winfield Farm P.O. Box 67 Oshawa, ON L1H 7K8 Tel: 905-686-1122 Email: scassidy@windfields.com	Industry – Thoroughbred Breeder, Farm Manager	2004
Dr. Wayne McDonell	OVC, University of Guelph Guelph, ON N1G 2W2 Tel: 519-824-4120x54095/54406 Email: wmcdonell@uoguelph.ca	Research	2001
Dr. Dan McMaster	210 Campbellville Road Campbellville, ON L0P 1B0 Tel: 905-854-1687 Fax: same	Industry – Equine Practitioner	2003
Dr. Rolph DeGannes Vice Chair	191 Western Avenue, Box 143 Schomberg, ON L0G 1T0 Tel: 905-939-7136 Fax: 905-393-8670	Equine Reproduction Specialist	2004
Marc-Andre Blouin	Ralston Purina Canada Inc. 404 Main St. P.O. Box 250	Feed Industry	2004

	Woodstock, ON N4S 7X5 Tel: 519-539-8561 x 139 Cell: 519-853-0825 Fax: 519-539-7883 Email: marcb@agribands.ca		
Paula Wellwood	Wellwood Stables Inc. R.R. #32 Cambridge, ON N3H 4R7 Tel: 519-658-0413 Fax: 519-658-0057	Canadian Standardbred Horse Society, Broodmare	2004
Melissa Todd	R.R. #1 Bright, ON N0B 1E0 Tel: 519-632-8916 Email: MJT@nonline.net	Industry – Hunter/Jumper	2001
Dr. Laurent Viel	Department of Clinical Studies University of Guelph Guelph, ON N1H 6R8 Tel: 519-824-4120 x 54067 Email: lviel@uoguelph.ca	Co-ordinator, Equine Program, Respiratory Specialist	2004
Dr. Robert Wright	OMAF Veterinary Science Wellington Place R.R. #1 Fergus, ON N1M 2W3 Tel: 519-846-3412 Fax: 519-846-8101 Email: robert.wright@omaf.gov.on.ca	Extension OMAF	2000
Al Patterson	Ontario Equestrian Federation 9120 Leslie Street, Suite 203 Richmond Hill, ON L4B 3J9 Tel: 905-709-6545 x 12 Toll free: 1-877-441-7112 Fax: 905-709-1867 Email: qtfarm@netcom.ca	Quarter Horse	2005

Fur Bearing Research and Services Subcommittee

Name	Points of Contact	Organization Represented	Term
Dr. Jim Atkinson	Dept. of Animal & Poultry Science, University of Guelph, Guelph, Ontario N1G 2W1 (519)824-4120 ext. 3716 Fax (519)836-9873 Email – jatkinso@aps.uoguelph.ca	University of Guelph	2002
Dr. Ian Duncan	Dept. of Animal & Poultry Science, University of Guelph, Guelph, Ontario N1G 2W1 (519)824-4120 ext. 3652 Fax (519)836-9873 email - iduncan@uoguelph.ca	University of Guelph	2002
Greg Fries	Mailing address, etc. not provided at request of member.	Ontario Fur Breeders Association	2002
Dr. Bruce Hunter	Department of Pathology, Ontario Veterinary College, University of Guelph, Guelph, Ontario N1G 2W1 (519)824-4120 ext. 4625 Fax (519)824-5930 email - bhunter@ovcnet.uoguelph.ca	University of Guelph	2002
Dr. Emilie Martin	Animal Health Laboratory Laboratory Services Division University of Guelph P. O. Box 3612 Guelph, Ontario N1H 6R8 (519) 824-4120 ext. 4523 Fax: (519) 821-8072 Email: emartin@lsd.uoguelph.ca	University of Guelph	2002
Ted Parkinson	Mailing address, etc. not provided at request of member.	Ontario Fur Breeders Association	2002
Gary Richardson	Finnie Distributing Inc., Mailing address, etc. not provided at request of member.	Feed Industry & Mink Sector	2002
Brian Tapscott, Chair	Wellington Place, R.R. #1 Fergus, Ontario N1M 2W3 (519)846-0941 (519)846-8178 email – brian.tapscott@omafra.gov.on.ca	Ontario Ministry of Agriculture, Food and Rural Affairs	2002

Goat Subcommittee Membership (2003)

Name	Location	Affiliation	Term To
Anita O'Brien Committee Chair	Ontario Ministry of Agriculture and Food Ontario Government Building P.O. Box 2004 Kemptville, Ontario K0G 1J0 Tel: 613-258-8299 Fax: 613-258-8392 E-mail: anita.obrien@omaf.gov.on.ca	OMAF	2006
Dr. Paula Menzies	Department of Population Medicine Ontario Veterinary College University of Guelph Guelph, Ontario N1G 2W1 Tel: 519-824-4120x4043 Fax: 519-763-8621 E-mail: pmenzies@ovc.uoguelph.ca	University of Guelph	2005
Delma Kennedy	Ontario Ministry of Agriculture and Food 1 Stone Road West Guelph, Ontario N1G 4Y2 Tel: 519-826-3290 Fax: 519-826-3254 E-mail: delma.kennedy@omaf.gov.on.ca	OMAF	2005
Allison Brown	R.R. #2, 2191 12 th Line of Asphodel Norwood, Ontario K0L 2V0 Tel: 705-639-2322 E-mail: pinehollow@accel.net	Fibre Producer	2004
Cindy Hubble	R.R. #3 Stirling, Ontario K0K 3E0 Tel: 613-395-2602 E-mail: dreamweaver@blvl.igs.net	OGBA	2004
Vanessa Taylor Milk Quality	Wellington Place Fergus, Ontario Tel: 519-846-3403 E-mail: vanessa.taylor@omaf.gov.on.ca	OMAF	2006
Brenda Norris	Ontario Ministry of Agriculture and Food 1 Stone Road West Guelph, Ontario N1G 4Y2 Tel: 519-825-4684 E-mail: brenda.norris@omaf.gov.on.ca	OMAF Dairy Food Safety Program	2005
Garry Claassen	R.R. #2 Teeswater, Ontario N0G 2S0 Tel: 519-357-4422 Fax: 519-357-4544 E-mail: claassen@wightman.ca	Goat Milk Producer	2005
Bill Alexander	R.R. #1 Norval, Ontario L0P 1K0 Tel: 905-877-6462 Fax: 905-877-6462	Goat Milk Producer	2004
Deirdre Armstrong	R.R. #5 Mount Forest, Ontario N0G 2L0 Tel: 519-323-2083 E-mail: dja@freespace.net	Ontario Goat Milk Producers' Association Secretary	2003

Pork Subcommittee Membership (2003)

Name	Affiliation	Address	Tel. etc.	Term
Jaydee Smith (co-chair)	OMAF	c/o Animal Science Bldg, Ridgetown College 120 Main St E., PO Box 4 Ridgetown Ontario N0P 2C0	Tel.: (519) 674-1542 Fax: (519) 674-1564 Email: jaydee.smith@omaf.gov.on.ca	April 2004
Ernest Sanford (co-chair)	Boehringer- Ingelheim	252 Concord Rd London, Ontario N6G 3H8	(519) 641-1785 esanford@ bur.boehringer-ingelheim.com	April 2006
Shane Carson	Masterfeeds	1020 Hargrieve Road London Ontario N6E 1P5	Tel.: (519) 685-4300 Fax: (519) 685-9410 Email: scarson@masterfeeds.com	April 2003
Tina Widowski	University of Guelph		(519) 824-4120x2408 twidowski@uoguelph.ca	2006
Kees de Lange	University of Guelph		(519) 824-4120x56477	
Bill Ballantyne	Maple Leaf Pork	Oakville Ontario	Tel.: (905) 403-3534 Fax: Email: ballanbi@mapleleaf.ca	2006
Luigi Faucitano	Agriculture and Agri-Food Canada	Dairy and Swine Research and Development Centre Lennoxville, Quebec	Tel.: (819) 565-9174 x Fax: (819) 564-5507 Email: faucitanol@EM.AGR.CA	April 2005
Bob Friendship	University of Guelph	Dept. of Population Medicine Guelph Ontario N1G 2W1	Tel.: (519) 824-4120 x4022 Fax: (519) 763-3117 Email: rfriends@ovc.uoguelph.ca	April 2003
Roger Hacker	University of Guelph	Dept. of Animal and Poultry Science	Tel.: (519) 824-4120 x3648 Fax: (519) 836-9873 Email: rhacker@aps.uoguelph.ca	April 2002
Frank Hogervorst	Avonbank Farm Equipment Ltd.	15456 Elginfield Road RR#3 Granton ON N0M 1V0	Tel.: (519) 225-2507 Fax: (519) 225-2506 Email: avonbank@quadro.net	April 2005
Ron Lackey	OMAF	581 Huron St. Stratford Ontario N5A 5T8	Tel.: (519) 271-7407 Fax: (519) 2713-5278 Email: ron.lackey@omaf.gov.on.ca	April 2006
Andy Robinson	University of Guelph	Department of Animal and Poultry Science Guelph Ontario N1G 2W1	Tel.: (519) 824-4120 x3679 Fax: Email: andyr@uoguelph.ca	April 2005
Richard Smelski	OSI	Box 400 Innerkip, Ontario N0J 2C0	Tel.: (519) 469-8109x24 Fax: (519) 469-8692 Email: rsmelski@orc.ca	April 2004
Helmuth Sprietzer	Ontario Pork	PO Box 740 Etobicoke, Ontario M9C 5H3	Tel.: (416) 621-1874 Email: hsprietzer@golden.net	April 2005
Harry Stam	Pork Producer	RR # 1 Jarvis Ontario N0A 1J0	Tel.: (519) 587-2094 Fax: (519) 587-3091 Email: stam@simcom.on.ca	April 2005

Broiler Subcommittee Membership (2003)

Chair: Dr. Rachel Ouckama Curtis Chicks Ltd. R.R. #1 Port Hope, Ontario L1A 3V5 Broiler Breeder / Hatchery
Tom Posthuma Chicken Farmers of Ontario R.R. #2 Dundas, Ontario L9H 5E2 Broiler Producer
Ed McKinley R.R. #4 Thamesville, Ontario N0P 2K0 Animal Research Institute of Ontario
Bill Vander Klippe OBHECC 251 Woodlawn Road West Geulph, Ontario N1H 8J1 Hatching Egg Producer
Dr. Maurice Smith 1 Field Crest Road Inglewood, Ontario L0N 1K0 Veterinary Consultant
Dr. Babak Sanei Department Pathobiology OVC, University of Guelph Guelph, Ontario N1G 2W1 OMAF
Dr. Steve Leeson University of Guelph, Department of Animal and Poultry Science Guelph, Ontario University of Guelph Representative
Kim Winterbottom Maple Lodge Farms Ltd. R.R. #2 Norval, Ontario L0P 1K0 Processor
Ms. Dee Britney Wallenstein Feed and Supply Box 22 Wallenstein, Ontario N0B 2S0 Feed Industry Representative

Egg Layer Subcommittee Membership (2003)

Dr. Peter Hunton Ontario Egg Producers 7195 Millcreek Drive Mississauga, Ontario L5H 4H1 Producer Board Representative
Mr. Craig Hunter Burnbrae Farms Ltd. Box 10, R.R. #1 Lynn, Ontario K0E 1M0 Egg Processor Representative
Dr. Brian Binnington University of Guelph Laboratory Services Division P.O. Box 3612 Guelph, Ontario Poultry Veterinarian Representative
Dr. Lloyd Weber 519 Maltby Road West Geulph, Ontario N1H 1G3 Egg Producer Representative
Dr. Gregory Bedecarrats University of Guelph Department of Animal and Poultry Science Geulph, Ontario University of Guelph Representative
Mr. Scott Houghton New Life Mills Ltd. 1400 Bishop Street Cambridge, Ontario N1R 6W8 Layer Industry Representative

Turkey Subcommittee Membership (2003)

Mrs. Diane Spratt OMAF Poultry Specialist Department Pathobiology, OVC Guelph, Ontario OMAF Representative	Dr. Jeff Zhang Cold Springs Farms Ltd. Thamesford, Ontario Hatchery Producer Representative
Paul Leatherbarrow Ontario Turkey Producers' Marketing Board Representative	Dr. Helen Wojcinski Hybrid Turkeys Kitchener, Ontario Primary Breeder Representative
Dr. Bruce Hunter Department of Pathobiology OVC, U of G Research Representative	Mr. Ken Cassidy Maple Leaf Poultry New Hamburg, Ontario Processor Representative
Dr. Jim Blackman Shur – Gain Research 150 Research Lane Guelph, Ontario Feed Industry Representative	Dr. Emily Martin Animal Health Laboratory Guelph, Ontario University of Guelph Representative

Sheep Subcommittee Membership (2003)

Name	Address	Phone	Affiliation	Term To
Dr. Paula Menzies	Dept. of Population Medicine, OVC University of Guelph Guelph, Ontario N1G 2W1	(519) 824-4120 ext. 4043	Researcher – Ontario Veterinary College	2003
Dr. John Cant	Dept. of Animal & Poultry Science, OAC University of Guelph	(519) 824-4120 ext. 6222	Researcher, U of G	2004
Mr. Fred Baker	R.R. #3 Mountain, Ontario K1A 0T6	(613) 989-5352	OSMA, CSF	2003
Mr. John Cuthbert	Canadian Co-operative Woolgrowers (CCWG) R.R. #1 Cookstown, Ontario L0L 1L0	(705) 458-4800	CCWG	2003
Mr. Lorne Small	General Delivery Kenilworth, ON N0G 2E0	(519) 848-6418	OSMA Appointee	2005
Ms. Delma Kennedy	OMAF 3 rd Floor N.E. – ARD 1 Stone Road West Guelph, Ontario N1G 4Y2	(519) 826-3290	OMAF – Sheep Flock Improvement Program	2003
Ms. Cathy Lennon	OSMA 130 Malcolm Road Guelph, Ontario N1K 1B1	(519) 836-0043	OSMA General Manager	2005
Mr. Mike Thompson	185 Queensway North Keswick, ON L4P 3C8	(905) 476-0530	OSMA Appointee	2005
Mr. Bill McCutcheon	R.R. #2 Grand Valley, Ontario L0N 1G0	(519) 928-9626	Canadian Sheep Breeders Association	2005
Ms. Cecelia Curtis	C/0 Floradale Feed Mill Ltd. Floradale, Ontario N0B 1V0	1-800-265-6126	Feed Industry	2003
Ms. Elizabeth Bzikot	Best Boar & Baa Farm R.R. #1 Conn, Ontario N0G 1N0	(519) 848-5694	Dairy Sheep Producers	2005
Ms. Anita O'Brien	OMAF, Box 2004 ORC Building Kemptville, Ontario K0G 1J0	(613) 258-8299	OMAF – extension	2003
Ms. Katherine Hoffman	OMAF, 1 Stone Road West 4 th Fl. NW, Innovation Unit Guelph, Ontario N1G 4Y2	(519) 826-4183	OMAF	2003
Mr. John Hemstead	354 Line 8 S., R.R. #2 Oro Station, Ontario L0L 2E0		OSMA Chair	2005
<i>Mr. Christoph Wand</i> <i>Chair</i> <i>2003 Report Author</i>	OMAF, Hwy. 59N, Box 666 Woodstock, Ontario N4S 7Z5	(519) 537-8422	OMAF – extension	2005

