

THE CANADIAN AYRSHIRE ASSOCIATION

Presented to
The World Ayrshire Conference Delegates

by
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Ayrshire-Canada

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THE CANADIAN AYRSHIRE ASSOCIATION



- 691 members
- Mainly in eastern
- Quebec
- Ontario
- Maritime provinces
 - New Brunswick
 - Prince Edward Island
 - Nova Scotia



The Canadian Ayrshire Association

- 9 board members
 - 3 Western section (2 Ontario -1 west)
 - 5 Quebec
 - 1 Maritimes

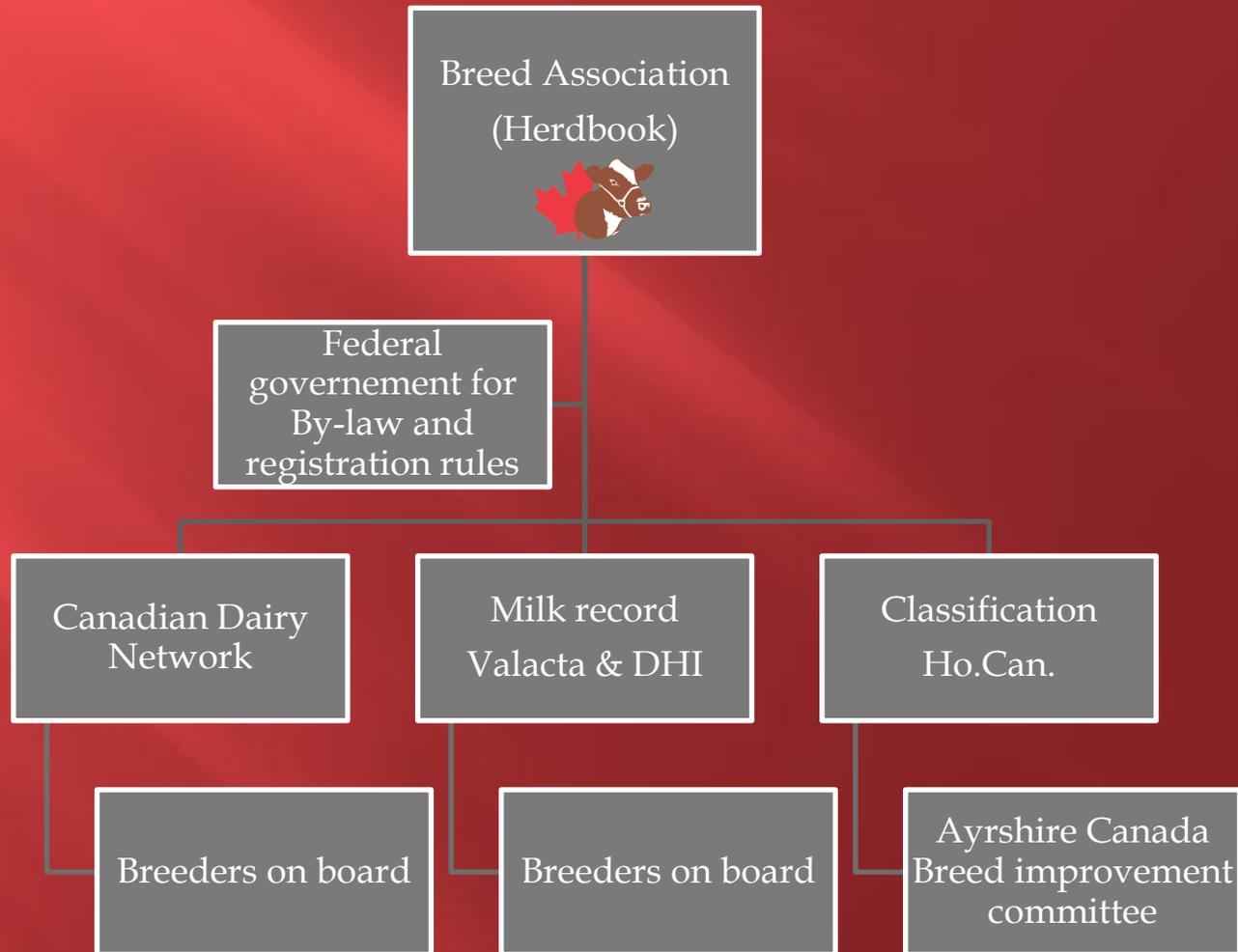
- Provincial association
 - Quebec (8 local clubs)
 - Ontario (2 local clubs : East & West)
 - West (4 provinces : 1 regional club)
 - East (3 provinces : 1 regional club)

- 3 employees «Full time »
 - National Fieldman
 - Head Office

- Employee « part time »
 - Herdbook & database, accounting, Review. etc

 - 1 Provincial Fieldman (Quebec)

The Canadian Ayrshire Association «organigram»



THE CANADIAN AYRSHIRE ASSOCIATION

- ▣ The members are close to their association
 - Follow and support genetic direction of the breed.
 - Strong supporters of the breed activities
 - They ask questions and give feedback of their needs and services offered....

- ▣ Historically the Canadian Ayrshire Breed is recognized for:
 - Excellent conformation
 - Very good components production (%Fat & Prot.)
 - Very good for health (often ignored by the industrie)

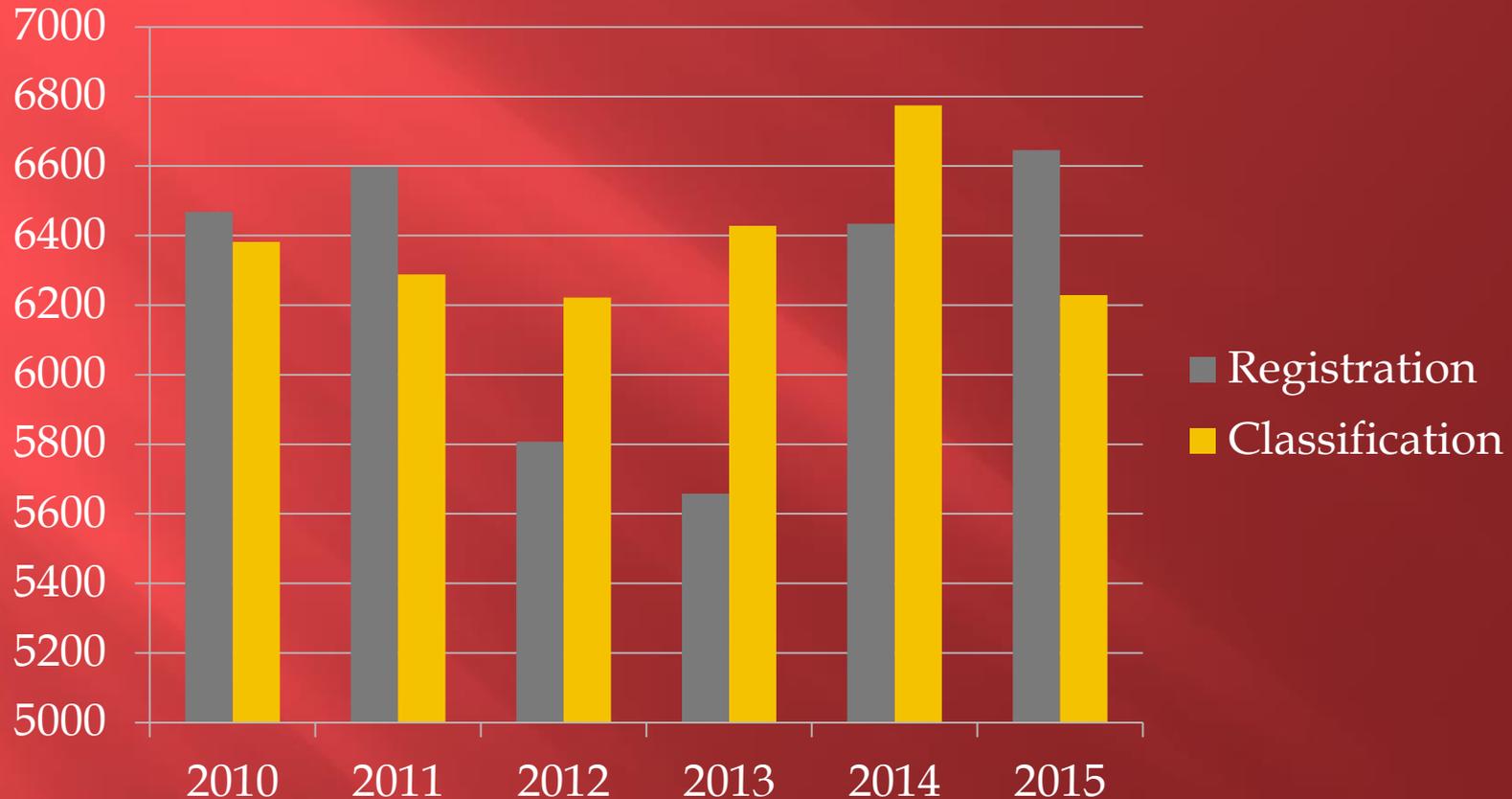
The Canadian Ayrshire Association

- ▣ 3rd largest breed in Canada; (3% AY, 4% JE, 92%HO)
- ▣ The registration of each animal is the base of each breed genetic improvement ;
 - +/-90% of Ayrshires are registered when they are born
 - Essential for pedigree herdbook;
- ▣ In Canada, only identification is compulsory.

Registration = Genetic + Traceability
Identification = Traceability



The Canadian Ayrshire Association



Registration = 6268 avg /yr
Classification = 6387 avg/yr
Milk Recording = +- 10000 cows

The activities

- ▣ Young breeders forums
 - Heifer exchanges, managment, etc
- ▣ The Canadian Ayrshire Review
- ▣ Help for buying and selling animals
- ▣ Judging school
- ▣ Classification
- ▣ Herdbook
- ▣ Shows
- ▣ Etc.

*Jeunes Ayrshire
Ayrshire Youth*

Ayrshire Canada veut se constituer une banque de noms pour les prochains événements internationaux.

Si tu es intéressé(e) à représenter le Canada à titre de jeune éleveur Ayrshire, fais-nous parvenir un court texte expliquant pourquoi tu aimerais participer à ce genre d'activité. Comme la plupart des activités se dérouleront en anglais, une connaissance pratique est requise.

En 2015, Nicolas Lacerte, Rachel MacFarlane et Matthew Burns ont fait un excellent travail et de beaux voyages...

Ne manquez pas cette chance!!
L'équipe de Ayrshire Canada

Fais-nous parvenir ton texte à :
michel@ayrshire-canada.com
yves@ayrshire-canada.com



*Nicolas Lacerte,
Sweden/Suède*



Rachel MacFarlane, Finland/Finlande

Ayrshire Canada wishes to develop a list of names for upcoming international events.

If you are interested in representing Canada as a young Ayrshire breeder, send us a short text explaining why you would like to participate in this type of events. As most activities are conducted in English, a working knowledge of this language is required.

In 2015, Nicolas Lacerte, Rachel MacFarlane, and Matthew Burns did excellent work and enjoyed nice trips... ◦

Don't miss this opportunity!!!
Ayrshire Canada Team



*Matthew Burns,
Colombia/Colombie*



AYRSHIRE CANADA

Please send your text to:
michel@ayrshire-canada.com
yves@ayrshire-canada.com

Production

Year	Milk Kg	Fat (Kg)	%	Protein Kg	%
2015	9040	366.1	4,13	303,6	3,36
BCA	226	226		230	
2014	8960	361.2	4,11	300.7	3,37
BCA	224	223		228	
2013	9000	358.2	4,07	302.3	3,36
BCA	225	221		229	
2012	8840	351.5	4,05	297	3,36
BCA	221	217		225	
2006	8520	330	3,96	282	3,32
BCA	213	204		214	

* 305 days in milk

** We work with BCA to compare production / Mature Equivalent



The Genetics

- ▣ The Association is the owner of the herdbook
- ▣ The Ayrshire breeders are still the owner of their genetics and cows families
 - Different for other breeds
 - ▣ A.I. companies taking control of bulls and cows families...
- ▣ We work together with breeders, partners and CDN to decide the formula of the genetic index(LPI) calculation
 - Ayrshire Canada breed improvement committee with advisors



- ▣ Our main genetic evaluation tool is Lifetime Profit(\$) Index
 - LPI = 51 % production, 31% conf. 18% Health
 - ▣ LPI is +98% correlation with TPI
- ▣ Canadian Dairy Network makes the calculation
- ▣ Breeders asking for efficiency and regularity on bull proofs and genetic evaluations
- ▣ We have a strong collaboration with our genetic advisor, Christopher Studer
 - Follow our genetic goals
 - Looking everywhere to find the best potential
 - [Bulls info](#) [Candidats infos](#)



Genetic potential cows

Reference year 1993 = 0

Year	LPI	M	F	P	Type	SCS	HL
1998	188	217	7,4	7,4	3,2	-0,04	1
2003	344	485	16,4	16,8	5,9	-0,05	1,5
2008	622	835	34	31	8,5	-0,13	2,7
2013	889	1141	49,4	42,2	11,9	-0,17	4,2



The Genetics

Base Changes for 2016 Versus 2015

	AY	BS	CN	GU	HO	JE	MS
LPI ¹	0	0	0	0	0	0	0
Milk (kg)	85	37	-13	-27	80	59	8
Fat (kg)	3.8	1.3	0.3	2.0	3.5	3.0	2.7
Protein (kg)	2.9	1.3	-0.1	-0.7	2.9	2.6	0.4
Conformation	0.71	0.65	0.52	0.23	0.90	0.27	0.18
Mammary System	0.66	0.54	0.70	0.11	0.91	0.25	0.14
Feet & Legs	0.67	0.61	0.24	0.35	0.59	0.10	0.22
Dairy Strength	0.47	0.44	-0.07	0.25	0.47	0.22	0.11
Rump	0.26	0.28	0.34	-0.05	0.20	0.17	0.22
Herd Life ²	0.43	0.37	0.09	0.05	0.62	0.08	-0.04
Somatic Cell Score ³	-0.05	-0.03	-0.03	-0.05	-0.03	-0.01	-0.02
Daughter Fertility ²	-0.10	0.22	-0.04	0.08	0.17	0.20	-0.08

1 - Base change for LPI is set to zero since it is already reflected by the change in the "Constant" included in the LPI formula.

2 - Traits expressed on scale of Relative Breeding Values (RBV).

3 - For Somatic Cell Score only, negative base change values represent a desirable trend in genetic progress.

The Ayrshire Canada Genetic Program

Rattrapages troupe 9210

gives Excellent Results !

Genetic base changes 2016 versus 2015

#1 for Milk with +85kg

#1 for Fat & Protein with + 6.7kg total

#1 for Feet and Legs +.67

#2 for Herd Life +.43

#2 for Conformation +.71

Production Health Conformation



The Canadian Ayrshire Association

- ▣ Genomics is now essential for breeders
 - Highest % of genotyped females of all breeds
 - Research projects based on genomic testing to increase reliability and eliminate haplotype AH1
 - +3950 genomic results in the database
 - [Info](#)

Average gain in LPI reliability due to genomics (August 2016)

Sub-Group for Ayrshire Breed	Average LPI Reliability (%)			
	Traditional	Genomics	Gain	DGV Weight
≥50K Young Bulls and Heifers with a Proven Sire	35	44	9	56%
Heifers with LD Genotype (Born 2014-2016)	32	41	9	56%
Younger Cows in 1st or 2nd Lactation with LD Genotype	45	52	7	54%
1st Crop Proven Sires in Canada	73	74	1	50%
Foreign Sires with MACE in Canada	61	66	5	52%

Sub-Group for Brown Swiss Breed	Average LPI Reliability (%)			
	Traditional	Genomics	Gain	DGV Weight
≥50K Young Bulls and Heifers with a Proven Sire	30	51	21	63%
Heifers with LD Genotype (Born 2014-2016)	30	52	22	63%
Younger Cows in 1st or 2nd Lactation with LD Genotype	44	61	17	58%
Foreign Cows with MACE in Canada	37	56	19	60%
1st Crop Proven Sires in Canada	64	74	10	54%
Foreign Sires with MACE in Canada	61	70	9	53%

Ayrshire =
Lowest of all major
breeds

Why ?
Because we don't share
results between
countries...

Will be essential to
increase our reliability and
world efficiency



Classification

- ▣ This is a good example of what we looking for...



ME 2-3 2X 10880kg milk 439kg Fat 4.2% 374kg Prot 3,4%
ME 3-5 2X 11800 kg Milk 479kg Fat 4.2 % 389kg Prot 3.3%
Lactation = 305 days

The Canadian Ayrshire Association

- ▣ To face the future, the Canadian Ayrshire breed has to
 - Continue to increase health traits and production
 - Maintain conformation
 - Modernize our way to work (National & International level)
 - ▣ Show is a good promotion but is not all...
 - ▣ Working with modern genetic tools
 - ▣ Genomics, genetic indexes
 - World wide data base exchange
 - Share information between Ayrshire countries (Genomics and Genetic)



I have 2 questions for you Worldwide Ayrshire breeders:

Question #1

How should the World Federation work to improve the Ayrshire situation around the world ?

Question #2

For a fast and safe Ayrshire genetic improvement:
Why do we not have public access to all genetics information from all «Ayrshire countries»?

EX: genotyping analysis results

For me, the World Ayrshire Federation should be involved with those issues and act like a leader to resolve them....

Thanks!

