



IMPLICATIONS OF RECENT DEVELOPMENTS FOR BREED ASSOCIATIONS

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World Guernsey Cattle Federation

World Guernsey Cattle Federation (WGCF)



- World body that represents member country organisations
- Mission to develop and promote the Guernsey breed around the world
- Uniting and mobilising a smaller breed by providing links to breeders globally
- Current population est. 50,000 animals



Recent Developments

- Genomics – the start
- Data – opportunities & risks
- Consolidation of industry
- Laws & Regulations



Genomics & Guernseys

- US & UK now publishing genomic proofs
- Variation between proof runs as more reference animals added- recognition in early stages of genomics there will be changes
- Canadian Guernseys also referenced but very little increase in reliability from Parent Average
- Move to include females as well as males from multiple countries for increased reliability
- Key messaging to farmers to manage as genomic teams

August 2017 Young Genomic Sires

Production NAAB

Reg.#	Code	Bull Name	REL	Milk	%	Fat	%	Prot	NM\$	CM\$	DPR	REL	PL	SCC	A2	PTI
3128910115	007GU00473	COULEE CREST NOVAK LAMBEAU-ET	47	540	.12	46	.02	21	357	367	0.1	35	2.6	2.96		104
78001154	076GU00810	COULEE CREST FAME LATIMER-ET	53	698	.02	33	.04	27	138	145	-2.1	40	-0.6	3.08	A2A2	96
78004779	007GU00467	PAOKIE LIL ERNIE	44	594	.08	36	-.01	17	244	245	0.4	32	1.3	2.90	A2A2	90
68048419	001GU00448	COULEE CREST CONQUEROR LOGO	48	600	.07	40	-.02	16	288	291	-0.2	38	2.3	2.84	A2A2	90
97001421	007GU00472	WALNUT RIDGE PRINCE CHARMING	40	43	.22	35	.05	9	312	329	0.9	32	3.7	2.87	A2A2	88
78006591	014GU00331	LANG HAVEN JUDGMENT NET WORTH-ET50	-220	.24	34	.09		8	306	331	1.2	37	3.0	2.95		87
78006594	014GU00332	LANG HAVEN AP WATCH ME NAENAE	51	803	-.14	15	-.03	21	217	215	-0.6	40	2.9	2.90		86
3009973860	049GU00143	DAIRYMAN LEGEND RICHARD	49	643	-.06	24	.02	25	222	235	-0.2	36	1.6	2.91	A2A2	82
3009973876	049GU00233	DAIRYMAN BIG BOY NEPTUNE	44	200	.01	16	.04	15	243	259	1.6	31	3.3	2.96	A2A2	81
3009973866	007GU00471	DAIRYMAN COPPER RANDALL-ET	49	549	-.02	22	-.02	14	286	290	0.6	35	3.1	2.74	A2A2	79
3130939306	007GU00470	RIPLEY FARMS JAG NEWTON	45	431	.02	23	-.02	10	221	219	0.2	32	2.7	2.91	A2A2	71
3009973867	049GU00144	DAIRYMAN DAWSON JORDY-ET	44	24	.10	26	.05	8	345	366	2.0	33	4.3	2.70	A2A2	71
78000794	120GU02591	WARWICK MANOR ALYMO BO	47	-244	.07	4	.04	1	159	172	0.9	35	4.6	3.04	A2A2	69
68039918	007GU00463	MARODORE GARY PISTOLL-ET	50	819	-.01	28	-.04	17	104	88	-0.8	39	-0.2	3.15	A2A2	60
11632409	200GU00307	LINDRIAN GRUMPY PILOT-ET	52	-111	.12	13	.05	6	203	224	0.8	41	2.3	2.80	A2A2	58

Small
reliability
increases at
each proof
run

December 2017 Young Genomic Sires

Production NAAB

Reg.#	Code	Bull Name	REL%	Milk	%	Fat	%	Prot	NM\$	CM\$	DPR	REL	PL	SCS	A2	PTI
128910115	007GU00473	COULEE CREST NOVAK LAMBEAU-ET	48	624	.11	47	.02	23	386	396	0.2	35	3.1	2.94		114
8001154	076GU00810	COULEE CREST FAME LATIMER-ET	54	740	-.01	32	.03	28	157	165	-2.3	41	-0.1	3.04	A2A2	97
8011347	091GU05223	RIPLEY FARMS SUNRISE RIVAL	50	710	.06	38	.04	29	260	276	0.2	38	1.2	2.93	A2A2	93
7001421	007GU00472	WALNUT RIDGE PRINCE CHARMING	42	53	.22	36	.04	10	329	346	1.0	32	3.9	2.84	A2A2	93
8004779	007GU00467	PAOKIE LIL ERNIE	45	581	.06	32	-.02	20	253	260	0.1	33	1.8	2.89	A2A2	92
8006594	014GU00332	LANG HAVEN AP WATCH ME NAENAE	52	828	-.13	15	-.02	22	228	227	-0.3	41	2.9	2.90		86
009973860	049GU00143	DAIRYMAN LEGEND RICHARD	50	642	-.06	23	.02	25	223	234	-0.1	37	2.0	2.93	A2A2	85
8006591	014GU00331	LANG HAVEN JUDGMENT NET WORTH-ET51	-233	.24	31	.08		7	291	313	1.1	38	3.4	2.99		82
009973866	007GU00471	DAIRYMAN COPPER RANDALL-ET	50	516	-.02	21	-.01	13	290	294	0.9	36	3.3	2.75	A2A2	80
130939306	007GU00470	RIPLEY FARMS JAG NEWTON	47	431	.03	24	.00	12	240	241	0.3	33	3.4	2.94	A2A2	80
7001404	014GU00474	ABIQUAACRES LEVIS JAEGER	49	133	.00	8	.00	4	256	266	2.2	36	5.5	2.72	A2A2	77
009973887	031GU00633	DAIRYMAN LAREDO RENEGADE	48	111	.13	31	.04	12	320	335	1.0	36	4.1	2.94	A2A2	75
009973876	049GU00233	DAIRYMAN BIG BOY NEPTUNE	49	179	-.02	10	.02	10	233	243	2.1	31	3.9	2.92	A2A2	75
009973867	049GU00144	DAIRYMAN DAWSON JORDY-ET	44	2	.11	26	.05	10	349	373	2.3	33	4.2	2.74	A2A2	74
8000794	120GU02591	WARWICK MANOR ALYMO BO	48	-236	.06	2	.05	3	148	162	0.6	35	4.5	3.05	A2A2	66

UK young sires

Name	GMI +20F	PLI	PLI Rib	Milk	Fat Kg	Ptn Kg	Fat %	Ptn %	Rib	TM	UK AI
TREWEY JUNOS ARTHUR	315	256	36	314	17.8	12.7	0.07	0.03	41	0.94	GCS
BICKFIELD NOVAK GRANDSLAM	293	200	35	349	14.6	11.2	-0.02	-0.02	40	1.10	GCS
BOURTON GRUMPYS CLAUDE	279	273	37	66	9.4	6.9	0.13	0.09	42	1.50	GCS
BOURTON GRUMPYS CLAUDE	279	273	37	66	9.4	6.9	0.13	0.09	42	1.50	UKD
TREWEY VICTOR EZEKIEL	274	228	37	187	13.5	8.3	0.12	0.04	42	0.70	GCS
TREWEY VICTOR EZEKIEL	274	228	37	187	13.5	8.3	0.12	0.04	42	0.70	UKD
TREDINNEY IVANS FLO RIDER	221	252	35	84	10.5	6.5	0.10	0.06	41	1.78	GCS
BRIDDLESFORD FOXGLOVES JAMES	206	188	37	136	9.5	7.4	0.06	0.04	42	0.68	GCS
BRIDDLESFORD FOXGLOVES JAMES	206	188	37	136	9.5	7.4	0.06	0.04	42	0.68	UKD
KELSMOR MEADOWSWEETS LION KING	173	136	34	52	1.5	2.4	0.00	0.02	40	-0.28	GCS
TREWEY JUNOS LEGEND	126	-24	33	280	13.8	6.3	0.03	-0.06	38	0.05	GCS
FLAMBEAU MANOR LADYS MAN	114	89	29	262	8.8	7.9	-0.03	-0.01	35	1.34	GCS
PAOKIE LIL ERNIE	87	56	15	306	9.1	7.5	-0.05	-0.03	17	0.83	GCS
ABER SAMSON	85	116	36	11	2.6	2.8	0.04	0.06	41	-0.13	GEN

Improving reliabilities with genomics

December 2017 Active AI Guernsey Sires

Production

NAAB			#	#	Yield Deviation															
Reg.#	Code	Bull Name	herds	dau	REL	PL	Milk	%	Fat	% Prot	NM\$	DPR	REL	SCC	Milk	Fat	Prot	A2	PTI	
68042542	007GU00446	LANG HAVEN GRUMPY NOVAK	56	116	85	2.8	1,027	-.05	35	-.01	32	374	1.1	61	2.991,554	45	43	A2A2	112	
68047797	001GU00446	RIPLEY FARMS PIE C TOBY	13	30	78	3.3	505	.10	39	.03	22	344	-0.1	49	2.81	597	52	31	A1A2	106
68045604	014GU00324	COULEE CREST BLUESPRUCE LAKODA	42	79	88	-1.4	1,101	-.01	46	-.01	35	171	-2.7	59	2.951,192	51	38	A1A2	94	
68048419	001GU00448	COULEE CREST CONQUEROR LOGO	9	10	64	2.8	515	.05	35	.02	20	296	-0.3	39	2.86	252	23	26	A2A2	94
68027038	014GU00318	JENS GOLD AARON COPPER-ET	38	91	90	3.2	421	.05	28	-.04	6	272	-0.2	66	2.83	459	28	5	A2A2	79
68045040	007GU00451	COULEE CREST GRUMPY LEGEND-ET	74	172	90	0.1	662	-.08	16	.02	25	115	-1.9	65	2.91	618	12	24	A2A2	71
68045934	001GU00445	LANG HAVEN ALSTAR NAVARRO-ET	8	22	76	0.7	842	-.10	21	-.03	22	140	0.1	48	3.13	740	7	21	A2A2	66
68016348	031GU00618	INDIAN ACRES AMERICAN PIE	79	206	96	3.7	403	-.12	-3	-.03	7	172	0.1	82	2.77	387	-8	5	A2A2	58
68029818	007GU00445	MARODORE T LES LIGHTNING-ET	36	65	86	-0.7	403	.07	29	.00	13	72	-1.3	61	3.17	375	33	14	A2A2	57
68031529	007GU00458	SPRINGHILL JOKES JAGUAR-ET	20	33	78	2.8	120	.02	11	-.01	2	147	-0.1	39	2.90	-99	8	-3	A2A2	54
68027067	031GU00627	MOZIERS SPIDER KINGSTON	24	57	86	-1.0	578	.05	36	.03	24	112	-1.4	61	3.27	688	41	26	A1A2	53
68025119	007GU00438	MARODORE AARONS LEVI-ET	61	100	88	1.5	289	-.01	9	-.05	1	82	0.5	61	2.88	248	5	-2	A2A2	46
68025916	001GU00441	SPRING WALK SHERBERTS TORO-ET	39	76	88	-0.2	214	.11	27	.02	10	96	-2.0	66	2.92	241	31	11	A2A2	41
68046196	054GU00469	UP THE CREEK SPIDERS SHAGGY-ET	8	13	68	-0.9	-555	.26	20	.17	11	57	-0.6	47	3.02-1,014	10	10	A1A2	30	
68019633	031GU00620	**KNAPPS CHALLENGE AMBITION-ET	8	13	68	0.8	250	-.03	6	.06	19	107	0.2	43	3.03	774	21	38	A2A2	29
68030411	031GU00624	SPRINGHILL J LONE STAR-ET	30	53	86	-2.3	203	.00	9	.04	13	-49	-1.8	61	3.10	124	6	11	A2A2	25
68010155	031GU00621	ROZELYN GOLIATHS JONATHAN-ET	12	32	82	3.4	-364	.19	15	.05	-4	269	3.8	59	2.62	-305	24	-1	A2A2	23
68014705	031GU00619	**FARIA FARMS MESSENGER	16	34	80	-0.3	246	-.06	0	-.05	-1	-89	-2.1	50	3.17	376	4	0	A2A2	1

** These bulls have NOT been genomic tested. The other animals have been and their proof is a blend between genomic results and the daughter proof information.**

Combination Approach to maximise data available

December 2017 Genetic Evaluations For Production

Reg #	NAAB #	Name	Herds	Dtrs.	REL	Milk	%	Fat	%	Prot	NMS	CMS	DPR	REL	PL	SCS	PTI
0068045809	031GU00631	PRFARIA FARMS CRUNCH SUPERMAN	22	33	77	1041	.08	61	.02	39	323	332	-1.1	42	-0.6	3.10	A1A2 G132
0068042542	007GU00446	LANG HAVEN GRUMPY NOVAK	56	116	85	1027	-.05	35	-.01	32	374	376	1.1	61	2.8	2.99	A2A2 G112
0068047797	001GU00446	RIPLEY FARMS PIE C TOBY	13	30	78	505	.10	39	.03	22	344	361	-0.1	49	3.3	2.81	A1A2 G106
0068041314		RIPLEY FARMS A PIE C TOP GUN	1	11	68	964	-.04	36	-.03	25	297	295	-0.6	38	2.2	2.87	105
0068045604	014GU00324	COULEE CREST BLUESPRUCE LAKODA	42	79	88	1101	-.01	46	-.01	35	171	176	-2.7	59	-1.4	2.95	A1A2 G 94
0068048419	001GU00448	COULEE CREST CONQUEROR LOGO	9	10	64	515	.05	35	.02	20	296	308	-0.3	39	2.8	2.86	A2A2 G 94
0000604761	007GU00398	SNIDERS RONALDS ALSTAR	142	432	97	1007	-.09	28	-.08	18	273	253	0.8	88	3.2	3.00	A2A2 G 80
0000605038	001GU00431	MARODORE RONALDS LABRON-ET	28	33	81	344	.06	24	.00	13	307	314	2.7	58	2.7	2.92	G 80
0068027038	014GU00318	JENS GOLD AARON COPPER-ET	38	91	90	421	.05	28	-.04	6	272	267	-0.2	66	3.2	2.83	A2A2 G 79
0000605002		RIPLEY FARMS RC SUNRISE	8	68	88	1167	.03	58	.02	41	175	186	-2.8	60	-1.2	2.98	71
0000604960	007GU00405	GOLDEN J RONALD GRUMPY	180	533	97	-37	.10	16	.05	8	314	333	0.9	90	4.7	2.82	A2A2 G 71
0068045040	007GU00451	COULEE CREST GRUMPY LEGEND-ET	74	172	90	662	-.08	16	.02	25	115	126	-1.9	65	0.1	2.91	A2A2 G 71
0068041606		RIPLEY FARMS R OAK CHRIS-ET	1	17	76	488	-.02	17	.01	18	174	181	-1.9	48	2.2	2.93	70
0000604670	007GU00395	SNIDERS OPTION AARON-ET	303	1004	98	398	.14	42	-.01	12	162	163	-2.9	94	0.4	2.94	A2A2 G 70
0068027378	007GU00440	RIPLEY FARMS AARON CORDELL	46	101	90	501	.09	38	.01	17	231	238	-0.1	67	1.7	2.89	A1A2 G 68
0000604312	200GU00109	PINE RIDGE DOUBLE L-ET	123	389	94	45	.15	29	-.01	0	336	343	0.2	83	4.5	2.69	A1A2 G 66
0068045934	001GU00445	LANG HAVEN ALSTAR NAVARRO-ET	8	22	76	842	-.10	21	-.03	22	140	131	0.1	48	0.7	3.13	A2A2 G 66

Data Ownership

- One of the most important questions – who owns your data?
- Structuring agreements to both encourage and protect use
- Guernsey breed cannot afford to lose samples



Data Integrity

- Quality data critical
- Great recognition during US project that breeders were under 6% error rate on herdbook data for initial submission
- Global project to ensure milk records matched with herdbook data prior to entry into genotyped database
- Decisions for dealing with populations lacking enough data to reliably publish

Challenges for Genomic Development

- Data variability with small reference population size – do we integrate crossbred data?
- Expanding internationally
- Resources



Direction of Breed – is it the right one?



Direction of Breed

- Whichever direction you pick – it better be the right one!
- Guernseys do not have the active reference population size currently to allow for multiple breeding strategies and goals with differing requirements – must be aligned
- Ensuring all member countries are aligned to the direction and actively



Engagement

- Key to any project – are the right stakeholders & partners in the room?
- Identify & on-board key skill sets required – utilise industry where available
- Alignment on goals from an industry perspective

Remember...

- Opportunities abound despite the challenges



Summary

- Data Ownership – know who owns what
- Data Integrity – get your data right
- Challenges for genetic development – resources
- Direction of Breed – Alignment
- Engagement – breeders, partners, industry
- Opportunities abound despite the challenges



Questions?

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