

The Business Impact of RamCompare on the Rainbow Flock of Charollais Sheep

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SBRT 2022



The Rainbow Flock of Charollais Sheep

History

First time farmer – not local to the area

Lowland farm running forage based system within Chester green belt

Farming compliments world class manufacturing consultancy business

2003 – 2 acres owned

2008 – 2 acres owned - 130 acres FBT – 80 acres grazing licence

2013 – 60 acres owned – 80 acres grazing licence

2018 – 85 acres owned

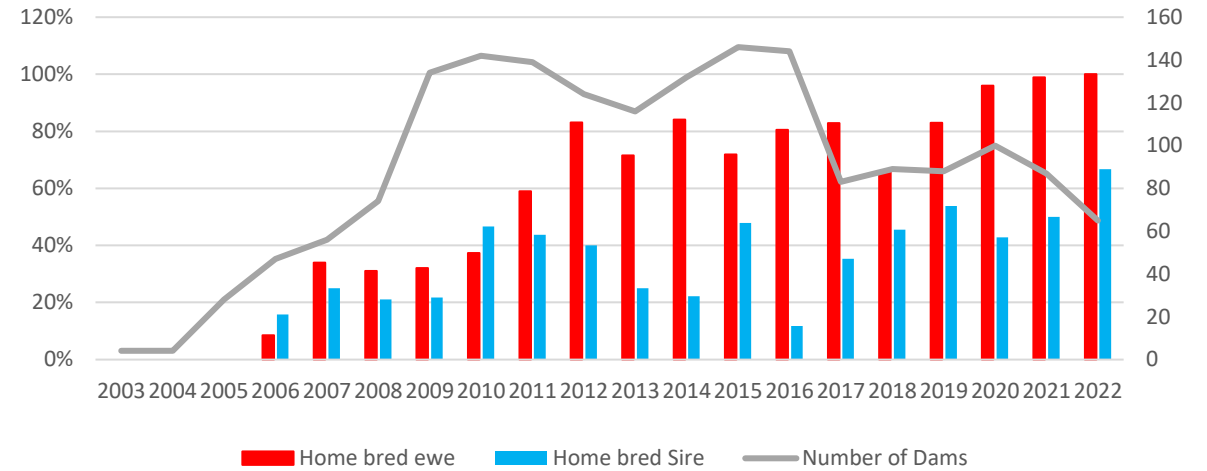
Charollais chosen after running a lamb abattoir

Pedigree sheep niche and away to add value

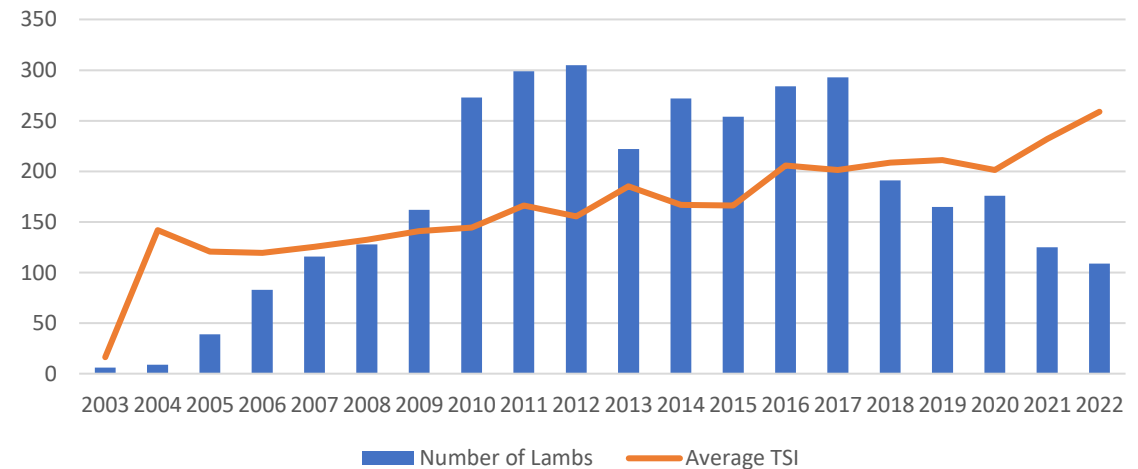
Lucrative Easter trade for finished lambs

Aim to sell 20-25 January Ram lambs per year

Rainbow Flock in Numbers



Rainbow Flock in Numbers



Data Collection to Support Our Goals

- Birth weight
- 3 week weight
- 8 – week weight
- 12 –week (wean weight)
- 12 week ultrasound
- Wean weight – ewes
- CT data
- Shearling ewe weight
- Ewe pre-tupping weight
- Carcass data of “rejects”

Year	Charollais	Rainbow Charollais	Number Sires Used	%	Commentary
2006	134	8	4	6%	
2007	100	7	6	7%	
2008	20	20	7	100%	Bluetongue restrictions
2009	107	14	8	13%	
2010	111	15	10	14%	
2011	119	16	8	13%	
2012	242	17	7	7%	
2013	63	14	6	22%	
2014	142	15	8	11%	
2015	46	8	8	17%	
2016	101	15	7	15%	
2017	108	14	6	13%	
2018	79	15	9	19%	includes 3 ewe lambs
2019	149	10	3	7%	
2020	26	6	2	23%	Covid - February lambs
2021	62	11	4	18%	
Total	1609	205		13%	



Scan ID: 2236
 Other ID: XPU,CH
 Scan date: 30-Apr-18
 Live Weight: 46.1

CT measurement – crucial for individual animals and vital for identifying “meaty bloodlines”

205 animals from 68 different sires 13% of all Charollais CT scanned from Rainbow flock

Lambe (2021) stated that CT scanning gave

1. More accurate phenotypes
2. More accurate EBV’s for carcass traits
3. > 90% accuracy
4. Increased accuracies fat weight, lean weight and muscularity of between 5 & 13%
5. Increased rates of genetic improvement (gain) of between 7-20%

Why CT phenotype measurements are vital!

21XPU04362	Terminal Sire Run	Birth Type	Rear Type	Analysed Progeny	Weight	Muscle Depth	Fat Depth	Weight Age Days	Gigot Score	Eight Week Weight	Mature Size	Scan Weight	Muscle Depth	Fat Depth	CT Lean	CT Muscularity	CT Eye Muscle Area	Terminal Sire Index	Maternal Index
					Kg	mm	mm		mm	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV
Conception Parental Average	Jun-08									3.13	-0.43	6.68	3.39		0.09			373	
Conception Parental Average	Jul-20									-0.5	-3.55	-1.83	2.12	0.02	0.44	0.02	1.09	145	148
Birthweight	Jan-21	ET	1	0	5.9			1		-0.76	-4.05	-2.11	2.13	-0.08	0.52	0.27	1.94	138	136
8 week weight	Mar-21	ET	1	0	30			59		-0.76	-4.04	-2.11	2.13	-0.08	0.52	0.27	1.94	138	135
Ultrasound Scanning	Apr-21	ET	1	0	41.2	31.47	4.1	85		1.36	0.02	3.59	2.75	0.77	0.58	0.27	2.2	274	208
CT Scanning	Jul-21	ET	1	0	58.2	34.5	6.42	176	56.8	1.28	-0.11	3.37	2.7	0.77	0.15	-2.38	1.64	230	205
21XPU04474	Terminal Sire Run	Birth Type	Rear Type	Analysed Progeny	Weight	Muscle Depth	Fat Depth	Weight Age Days	Gigot Score	Eight Week Weight	Mature Size	Scan Weight	Muscle Depth	Fat Depth	CT Lean	CT Muscularity	CT Eye Muscle Area	Terminal Sire Index	Maternal Index
					Kg	mm	mm		mm	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV	EBV
Conception Parental Average	Jul-20									1.96	4.58	5.16	1.72	-0.6	0.57	1.31	2.05	257	182
Birthweight	Jan-21	1	1	0	5.7			1		1.92	4.68	5.23	1.32	-0.58	0.59	1.81	1.66	253	203
8 week weight	Mar-21	1	1	0	29.6			55		2.24	5.3	5.98	1.31	-0.58	0.59	1.81	1.66	266	216
Ultrasound Scanning	Apr-21	1	1	0	38.9	23.83	2.33	81		2.68	6.12	7.33	0.68	-0.3	0.5	1.81	1.23	280	215
CT Scanning	Jul-21	1	1	0	64.8	35.5	6.42	172	73.3	2.64	6.05	7.21	0.52	-0.17	0.83	2.89	1.62	309	211

Our Breeding Programme

Production of high health status, performance recorded Charollais sheep which are fit for purpose and **add value** to customers flocks whilst improving efficiency for the retained maternal flock and those animals not selected to be sold as breeding animals.

Our Specific Ram Breeding Goals

To continuously improve the **economic traits** (carcass weight, conformation and fat class) using estimated breeding values (muscle depth, gigot muscularity & lean weight index) so that our customers have a choice of rams which can match their market needs and improve their sheep enterprise margin.

Our Ram Customers

After 18 years our customers can be categorized as follows:

1. **SOL**
2. **BS**
3. **NW**
4. **PS**
5. **NPB**
6. **NG**
7. **RP**
8. **CP**
9. **ESPB**

Customer Categories Explained

Category	Definition	Starting question	Primary route to market	Knowledge of EBVs	Ram price	2022 Ram sales	After sales contact from them
SOL	Semen on legs	I need a ram	Liveweight	None	££££	3	Rare
BS	Breed sensitive	I want a Charollais ram	Liveweight	*	££	1	Only if something goes wrong
NW	Neighbourhood watch	My neighbour bought a ram from you and it seems to have done alright	Liveweight or deadweight local abattoir	**	££	1	Always if they are a deadweight seller
PS	Phenotype selectors	I am looking for a tight skinned ram with a small head	Liveweight	**	£££	2	Sometimes with good news
NPB	New Pedigree Breeders	Have you any show lambs with a high index	Pedigree breeders	***	£££££	1	Yes
NG	Newbie Gurus	I have been looking at the Signet website or are you ChazCompare	Deadweight major retail supply	***	££££	2	Ad nauseum until they are confident
RP	Returning purchasers	Could you put my name on x number of rams with good growth rate	Deadweight and liveweight	****	£££	5	Have been to their farm
CP	Contract purchasers	Could you grow me 5 rams with a Top 5%	Deadweight retailer contract	*****	££££	10	Farm visit, share kill sheets
EPB	Established Pedigree Breeders	How good is that high index ram	Pedigree breeders	*****	££££££	1	From conception to progeny sale

RamCompare - Rainbow Flock Involvement

Why we became involved?

- Interested
- Full supply chain involvement
- Essential for efficiency improvement

What did we do?

- Use semen on pedigree and commercial flocks
- Compared our abattoir data with RamCompare results
- Put forward our best genetics both semen and rams
- Focused on the results and changed our breeding programme as necessary
- Replicated though ChazCompare!

- Go Statto! 17XPU02870

← Tweet



Andrew Walton
@MeatyAndrew

Used free [@charollaisheep](#) semen from [@RamCompare](#). 17XPU02870 index of 455, Top 1%. Naming him after [@SamBoonBreeding](#) Rainbow Statistician



11:05 AM · May 25, 2017 · Twitter for iPhone

ChazCompare – an opportunity too good to miss!

A brilliant idea by Jamie Wild at Redhill Charollais!

Presented at Charollais Sire Reference Meeting in 2018

I was the only one to accept the invitation!!

- 320 North of England Mules – 70-75Kg – 2 and 3 crop
- Single Sire mated to 8 Charollais shearling rams
- Tight lambing period (10 days)
- Ewes and lambs commercially managed
- Grazed on one area
- Collect liveweight data (BW; 8wkW; Ultrasound scan; PSW)
- Collect carcass data – conformation priority
- Utilize best performing bloodlines within pedigree flocks
- Improve ram sale margins by increasing conformation
- Tweaked with AHDB involvement
- More than just a bolt-on project!

- Go Statto!



ChazCompare – What have we learned and what surprised us?

- Accurate figures are better than unsubstantiated emotions!
- **Go Statto!**

Sire	Carcass Conformation EBV of Sire	Total lambs	% E & U Carcasses
17XPU02870	1.12	60	47%
17WGH01512	0.57	48	44%
17WGH01548	0.29	48	40%
14DG04690	0.94	65	38%
17XPU02835	0.10	55	35%
17WGH01117	0.14	53	32%
17WF02248	-0.39	55	25%

- No beauty pageants are held in an abattoir
 - 17XPU02835 was affectionally known as Pillock!
- You can have everything, but you must select for it
- If you are not CT scanning breeding rams, are you really trying to improve?
- Even though we standardized the ewes there was a variation in ewe performance



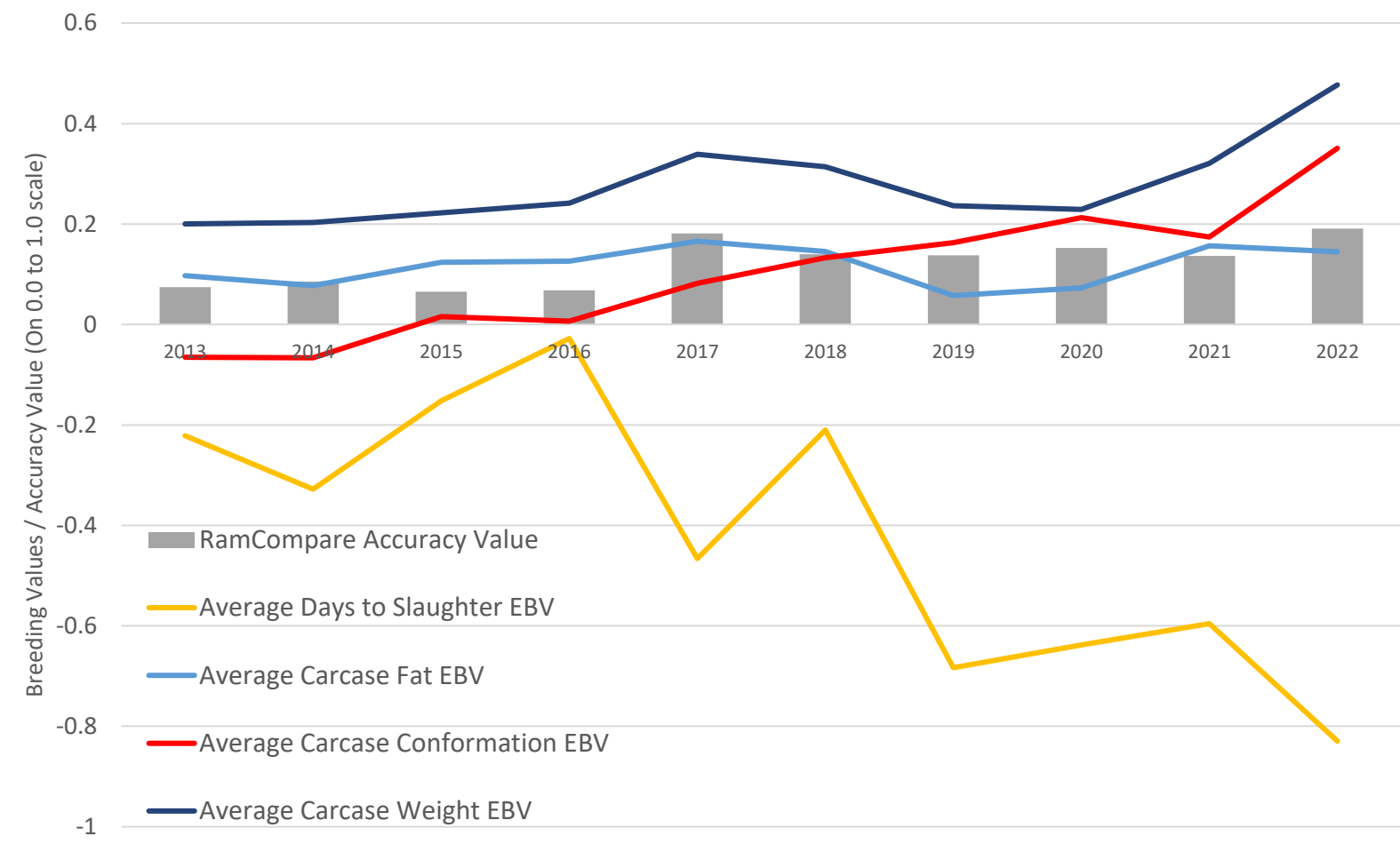
Is the Rainbow Flock achieving its breeding goals through its involvement with RamCompare and Chaz Compare?

- Increase in carcass weight EBV
- Increase in carcass conformation EBV
- Reduction in days to slaughter EBV
- Consistent carcass fat EBV

The financial difference between an 19Kg O3L carcass and a 21Kg U3L carcass was £10.30 on 14/06/22

Worth pursuing for our customers benefit!

Rainbow Charollais Flock - Genetic Trends for Commercial Abattoir Traits



What does the future hold?

- Customised indexes (Signet 2021) – for my customers that understand them
- More Meat less Methane
- Prove the hypothesis that loin width is more appropriate to increase carcass value than loin depth
- Finish my self-funded DAg to add credibility to ChazCompare and Rainbow Breeding programme
- Increased margins and revenue because agriculture is only sustainable if profitable

Acknowledgements

My thanks go to:

Jamie & Sue Wild

Messers Taylor @ Redhill

Sam Boon

Bridget Lloyd

My long suffering wife Jan for allowing this ego trip!

AHDB for sponsoring my attendance

References

Lambe, N.R. 2021 CT Scanning – value to terminal sire breeder Sheep Breeders Round Table online conference 2021

[SBRT Session 4 - Terminal sire breeding and new ways to sell stock - YouTube](https://www.youtube.com/watch?v=6oFFu8SGxyQ)

<https://www.youtube.com/watch?v=6oFFu8SGxyQ>

Signet Breeding Services (2021) Comparison of Customised indexes <https://www.signetdata.com/member-services/custom-indexes/apply-indexes/> Last accessed 10th November 2021