Rotherwood Farming

Hold their 3rd on farm APR bull Helmsman auction sale
Offering 16 2 year old and 3 3 year old and 1 4 year old bull
To be held on the property "Rotherwood"
342A Victoria Valley Rd, Ouse at 1pm 28th August 2014

Inspection: 11.30am (bbq & refreshments available)



www.rotherwood.net.au

All bulls vaccinated for BVDV and 7 in1 plus MN1 Certification and EU accredited

Contact: Bernard Brain- 6287 1309 or 0428 871 309 Roberts Ltd: Rebecca Oakley 0408146033

Helen Sproule- 62871267 or 0448 871 313 Tim Woodham- 0418 323 425

Jock Gibson- 0418 133595

History of the "Rotherwood" herd:

The herd began in the late 1950's with 26 heifers bought from "Glenelg" Gretna. In 1963 we started weighing calves, calculating weight ratios, and culling cows whose calves under-performed- we were probably the first Angus herd in Tasmania to do performance recording. Over the next few years sires were purchased from Tasmania, Victoria and New Zealand with variable results. Some performed well, but others not as well as home –bred sires. Others had to be culled due to their foot problems along with their progeny.

In the early 1970's an Agricultural Officer suggested setting up a nucleus breeding scheme; with 6 breeders suppling their best heifers to the nucleus and receiving a set ratio of bulls in return. Rotherwood was chosen to host the nucleus herd. The aim was to have a regular supply of bulls of the type the members desired-which would improve their herds, at a reasonable cost. The bulls to be used in the nucleus, or supplied, were chosen at a meeting in June, when the new heifers arrived. This worked well for 33 years until it was wound up because of a drop in the number of herds, due to owner retirement, and property or herd sale, when the gene pool became too small. It had initially been 2000 cows.

The herd enrolled in Breedplan from the beginning, as an Angus Performance Register herd. At the time our 200 and 600day weight EBV's were about 20% above breed average until the influence of North American genetics occurred. Our aim is to keep birth weights low, while maximizing 600 day weights with improved muscling and keeping our reputation for docile cattle with good conformation. Surplus cows and heifers (EU accredited) are often sold at the Powranna autumn commercial cattle sale.

After many years selling bulls privately we decided to move to a helmsman auction system in 2012. We felt that it would provide the fairest method of selling bulls by auction. The first sale went well for us and buyers were happy with the type of auction system that we used, as it gave prospective purchasers time to go back and look at the bulls during the auction, and change their preferred animal if so desired.

Relevant Terms:

AMFU, CAFU, NHFU, and DDFU-untested for the genetic disorders but believed to be free.

AMF, CAF, NHF, and DDF- tested for genetic disorders and are free.

AM_%- the _% probability that the animal is an AM carrier, etc.

Calving ease direct (CEM or CEdir) and Calving ease Daughters (CED or CEDtrs) - genetic estimate of ease of dam or daughter as 2yo heifers to calve without assistance

Birth weight (Bwt) - Estimates of the genetic differences between animals in calf birth weight.

200 day weight- Estimates of the genetic differences between animals in liveweight at 200 days of age.

400 day weight- Estimates of the genetic differences between animals in liveweight at 400 days of age.

600 day weight- Estimates of the genetic differences between animals in liveweight at 600 days of age.

Mature weight (Mwt) - Estimates of the genetic differences between animals in cow weight at 5 years of age.

Milk- Estimates of the genetic differences between animals in milk production, expressed as variation in 200-day weight of daughter's calves.

Scrotal size (SS) - Estimates of the genetic differences between animals in scrotal circumference at 400 days of age.

Days to calving (DOC)- Estimates of the genetic differences in female fertility, expressed as the number of days from the start of the joining period until subsequent calving.

Carcase weight(Cwt) - Estimates of the genetic differences between animals in carcase weight, adjusted to 650 days of age.

Long fed/CAAB \$index (LF) - Estimates of the genetic differences between animals in net profitability per cow joined for a high fertility self-replacing commercial Angus herd in temperate Australia targeting pasture grown steers with 270 day feedlot finishing period for the high quality, high marbled Japanese export market. Steers are assumed marketed at 740 kg live weight (420 kg HSCW and 25 mm P8 fat depth) at 26 months of age. Significant emphasis is placed on marbling and 600 day growth.

Heavy grass fed steer \$index (HG) - Estimates of the genetic differences between animals in net profitability per cow joined for a self-replacing Angus herd in temperate Australia that sells heavy grass fed steers for markets like the EU and light grass fed Jap Ox Steers are assumed marketed at 600kg live with (300 kg HSCW and 15mm P8 fat depth) at 22 months of age. Emphasis is placed on growth and carcase yield while maintaining fertility and marbling.

Short fed domestic \$index (SF) - Estimates of the genetic differences between animals in net profitability per cow joined for a high fertility self-replacing commercial Angus

herd selling feeder steers and heifers for the short fed domestic feedlot trade. Steers are assumed marketed at 445 kg live weight (245 kg HSCW and 10 mm P8 fat depth) at 15 months of age. Emphasis is placed on growth to 400 days and high carcase yield while maintaining fertility and marbling.

Terminal \$index (TI)- Estimates of the genetic differences between animals in net profitability for a commercial crossbred herd where no animals are kept for breeding and targeting pasture grown steers and heifers with a 100 day feedlot finishing period. Progeny are assumed marketing at 600kg live weight (325 kg HSCW and 17mm P8 fat depth) at 23 months of age. Emphasis is on growth and carcase yield with no weighting placed on calving ease, female fertility or milk.

Accuracy (Acc)- Provides an indication of the reliability of an EBV. As more performance information becomes available on an animal (or its progeny, or relatives) then the accuracy of its EBVs for particular traits will increase.

RECESSIVE GENETIC CONDITION

INFORMATION FOR BULL BUYERS

This is information for **bull buyers** about the undesirable genetic conditions, Arthrogryposis Multiplex (AM), Neuropathic Hydrocephalus (NH), Contractural Arachnodactyly (CA) and Developmental Duplications (DD).

Putting Undesirable Genetic Recessive Conditions in Perspective

All breeds of cattle, in fact all mammals including humans, have undesirable genetic conditions. Fortunately, advances in molecular genetics have facilitated the development of DNA tests for their management. Angus Australia is at the forefront of development of strategies to manage undesirable genetic conditions and Angus members are leading the industry with their uptake of this technology.

What are AM, NH CA and DD?

Arthrogryposis means 'curved or hooked joints'. Multiplex indicates there are multiple abnormalities associated with the condition. Animals with the NH condition have a large head. Both AM and NH affected calves are not born alive. Whilst; calves affected by CA are born alive and can reproduce, muscle contractures restrict the movement of joints, particularly in the hind legs. Abnormal muscle contracture decreases dramatically as a calf ages, while muscle development always remains poor. DD causes duplication of limbs, etc.

How are the conditions inherited?

Research in the U.S. and Australia indicates that AM, NH CA and DD are simply inherited recessive conditions. This means that a single pair of genes controls the condition. For this mode of inheritance two copies of the undesirable gene need to be present before the condition is seen; in which case you may get an abnormal calf. A more common example of a trait with a simple recessive pattern of inheritance is black and red coat colour. Animals with only one copy of the undesirable gene (and one copy of the normal form of the gene) appear normal and are known as "carriers".

What happens when carriers are mated to other animals?

Carriers, will on average, pass the undesirable gene form to a random half (50 %) of their progeny.

When a carrier bull and carrier cow is mated, there should be a 25% chance that the progeny produced will have two normal genes. There should be a 50% chance that the mating will produce a carrier. However, there could be a 25% chance that the progeny have two copies of the undesirable gene.

Key point: The number of reported observations of AM, NH CA and DD calves is very low and there is certainly no need for panic.

Key point: With today's DNA tools undesirable genetic conditions can be managed! If animals tested free of the undesirable gene are mated to carrier animals the condition will not be expressed at all. All calves will appear normal, but approximately half (50%) could be expected to be carriers.

How is the AM NH CA and DD status of animals reported?

A DNA-based test has been developed that can be used to determine whether an animal is a carrier or free of the AM, NH CA or DD gene.

Angus Australia uses sophisticated software to calculate the probability of (all untested) animals to be a carrier. The software uses the test results of any relatives in the calculations and the probabilities may change as new results for additional animals become available. The genetic status of animals is being reported using five categories:

AMF Tested AM free

AMFU Based on pedigree AM free - Animal has not been tested

AM__% _% probability the animal is an AM carrier

AMC Tested AM-Carrier

AMA AM-Affected

For NH CA or DD, simply replace AM in the above table with NH CA or DD.

Registration certificates and the Angus Australia (AA) web-database display these codes. This information is displayed on the animal details page and can be accessed by conducting an "Animal Search" from the Angus website or looking up individual animals listed for sale in a sale catalogue.

Implications for Commercial Producers

Your decision on what genetic condition statuses are acceptable will depend on the genetics of your cow herd (which bulls you previously used), whether you have a straightbreeding or crossbreeding enterprise and whether some female progeny will be retained as breeders. Angus Australia seedstock breeders are being proactive and transparent in managing these genetic conditions, endeavouring to provide the best information available. The greatest risk to the commercial sector from undesirable genetic recessive conditions comes from unregistered bulls with unknown genetic background. The DNA testing that Angus Australia seedstock producers are investing in provides buyers of registered Angus bulls with unmatched quality assurance.

For further information contact Angus Australia's Breed Development and Innovation Manager at (02) 6773 4602.

Key point: For the condition to be expressed the undesirable gene needs to be present on both sides of the pedigree and both the sire and dam need to be a carrier.

Key point: The genetic status of an animal is subject to change and will be reanalysed And adjusted each week as DNA test results of relatives are received.



F148			Pen 1		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGY8	19/09/2010	2		3.3	35	68	91	84	12	2.1	-3.3	52	LF	HG	SF	TI
Acc				39%		72%	65%	64%	67%	60%	47%	67%	37%	55%	93	81	68	69

Tag G1 TDG G1 Pen 1



G1			Pen 1		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TGDB28	TDGX134	16/07/2011	1	-0.4	1.8	25	52	73	79	9	-0.7		43	LF	HG	SF	TI
Acc				37%	28%	79%	70%	69%	70%	61%	44%	71%		57%	53	53	42	52



G97			Pen 1		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGC128	21/08/2011	1.2	0.5	2.9	28	54	61	56	10	1.3		37	LF	HG	SF	TI
Acc				38%	32%	77%	69%	69%	69%	62%	43%	71%		37%	64	57	55	47

TDG G118

TDG G118 Pen 1



G118	3		Pen 1		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGB28	TDGA63	1/09/2011	0.3	0.4	4.1	30	60	90	94	8	2.5		46	LF	HG	SF	TI
Acc				36%	26%	73%	67%	67%	68%	61%	40%	70%		56%	70	69	51	64

Tag H 29

TDG H 29 Pen 2



Price..... Purchaser.....

H29			Pen 2		AM	AMFU		NH	NHFU		CA	CA1%		DD	DD4%	,)		
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE81	TDGC139	1/08/2012	0.7	0.9	3.7	32	62	80	79	8	3		45	LF	HG	SF	TI
Acc				36%	23%	71%	66%	67%	70%	63%	43%	67%		54%	78	70	62	59

Tag H 45

TDG H45

Pen 2



H45			Pen 2		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGC39	5/08/2012	1.6	1.9	4.2	33	67	84	82	8	2.3	-2.2	48	LF	HG	SF	TI
Acc				42%	34%	72%	67%	68%	71%	64%	49%	68%	37%	56%	98	76	70	63

Tag H 90

TDG H90

Pen 2



Price..... Purchaser.....

HS	90			Pen 2		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
		sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EE	3V	TDGE97	TDGA155	2/09/2012	-4.5		6.5	35	64	93	89	5	0.2		46	LF	HG	SF	TI
A	CC				37%		72%	66%	66%	70%	63%	46%	67%		53%	67	63	49	65

Tag H 58

TDG H58

Pen 3



H58			Pen 3		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGD13	10/08/2012	1	0.9	3.5	35	71	91	92	11	1.8	-3.5	51	LF	HG	SF	TI
Acc				45%	36%	72%	67%	67%	70%	63%	49%	68%	39	56%	108	82	73	68



H99			Pen 3		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE81	TDGD80	4/08/2012			4.8	36	71	95	90	10	3.2		51	LF	HG	SF	TI
Acc						72%	66%	66%	70%	63%	42%	37%		53%	88	79	68	71

Tag H 101

TDG H101

Pen 3



H101			Pen 3		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE81	TDGC67	8/09/2012	0.3		4.3	33	67	88	81	10	2.4		48	LF	HG	SF	TI
Acc				35%		70%	65%	66%	70%	63%	43%	66%		23%	82	75	65	65

Tag H 112

TDG H112 Pen 3



Price..... Purchaser.....

H11	2		Pen 3		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE81	RDGB132	15/09/2012	-2.2		5	33	64	81	79	8	1.4		45	LF	HG	SF	TI
Acc				35%		71%	65%	66%	69%	62%	42%	65%		52%	73	55	59	60

Tag H 27

TDG H27

Pen 4



H27			Pen 4		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE17	TDGF20	1/08/2012	0.4	-0.3	4.5	32	65	91	88	11	1		52	LF	HG	SF	TI
Acc				36%	24%	71%	65%	66%	59%	61%	41%	66%		53%	81	74	61	66



H33			Pen 4		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE81	TDGD21	2/08/2012	1.9	1.1	3.4	29	61	78	73	9	0.8		43	LF	HG	SF	TI
Acc				35%	23%	72%	66%	66%	70%	63%	41%	66%		53%	77	68	61	57

Tag H61

TDGH61

Pen 4



H61			Pen 4		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGD83	11/08/2012	-0.5	-0.1	4.4	34	67	85	80	11	1.7		49	LF	HG	SF	TI
Acc				41%	33%	72%	66%	67%	69%	62%	48%	57%		54%	95	75	68	65



H62			Pen 4		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE17	TDGE76	12/08/2012	2.9	2.1	2.5	28	61	77	60	9	1.6		41	LF	HG	SF	TI
Acc			35	23%	71%	65%	65%	70%	61%	40%	65%	53%		54%	80	71	65	57

Tag H 78

TDGH78

Pen 4



H78			Pen 4		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TFAC312	TDGE118	21/08/2012	-0.5	0.7	4.8	38	70	91	82	9	1.8		52	LF	HG	SF	TI
Acc				40%	32%	72%	66%	67%	70%	62%	46%	57%		55%	100	80	71	68



Н3			Pen 5		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE99	TDGZ104	23/07/2012	1.4	-1.5	2.3	24	58	66	66	9	1.7		40	LF	HG	SF	TI
Acc				37%	25%	71%	66%	67%	70%	62%	46%	67%		54%	68	60	58	50

Tag H 6

TDGH6

Pen 5



Н6			Pen 5		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE99	TDGC19	23/07/2012	3.7	1.9	1.1	25	56	72	63	10	1.2		39	LF	HG	SF	TI
Acc				37%	25%	72%	66%	67%	70%	54%	45%	67%		54%	72	63	57	52



H43			Pen 5		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE99	TDGA98	4/08/2012	1.9	-0.2	3.1	28	57	81	83	11	1.3		42	LF	HG	SF	TI
Acc				36%	24%	71%	65%	66%	70%	63%	44%	67%		53%	75	68	56	59

Tag H 119

TDGH119 Pen 5



H119			Pen 5		AM	AMF		NH	NHF		CA	CAF		DD	DDF			
	sire	dam	D of B	CEM	CED	Bwt	200day	400day	600day	Mwt	milk	SS	DC	Cwt	index	valu	es	
EBV	TDGE97	TDGE62	22/09/2012			4.1	32	61	81	78		1.1			LF	HG	SF	TI
Acc						66%	61%	57%	59%	55%		42%			67	61	54	58