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MEAT & LIVESTOCK AUSTRALIA

meatup FORUM

For the latest in red meat research and development
Broken Hill, NSW – 14 October 2026

MEAT UP FORUM
BROKEN HILL 14/10/2026

Measured Goats

Tom Granleese, Trudie Atkinson, Dan Forwood, Tracie Bird-Gardiner, Rea Alexandri, Erin Smith, Sue Mortimer, Pete McGilchrist, Nicole Leighton, Daniel Brown, Dom Watters, Sam Walkom

NSW GOVERNMENT
Department of Primary Industries and Regional Development

agbu

NSW GOVERNMENT Local Land Services Western

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The Team Presently

Past



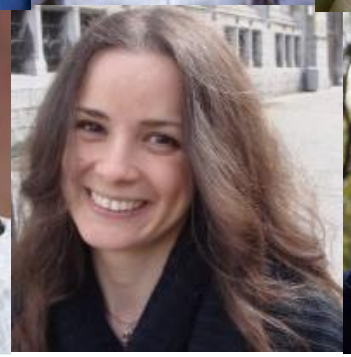





















Acknowledgement of photos





Nicole Leighton - NSW DPIRD Measured Goats project site coordinator

The project

MLA DC & NSW Govt $3.8m
Condobolin ARAS (Central NSW)

10,000 kids
5 drops over 3.5 years
8-month cycles
Boer & Kalahari
Rangeland
Crossbreeding

Reproduction
Carcase
Growth
Feet and legs
Visual traits
Survival
Worm resistance
Udder scores
Meat eating quality
Hybrid vigour

Just weaned CH3
260,000 data points to date

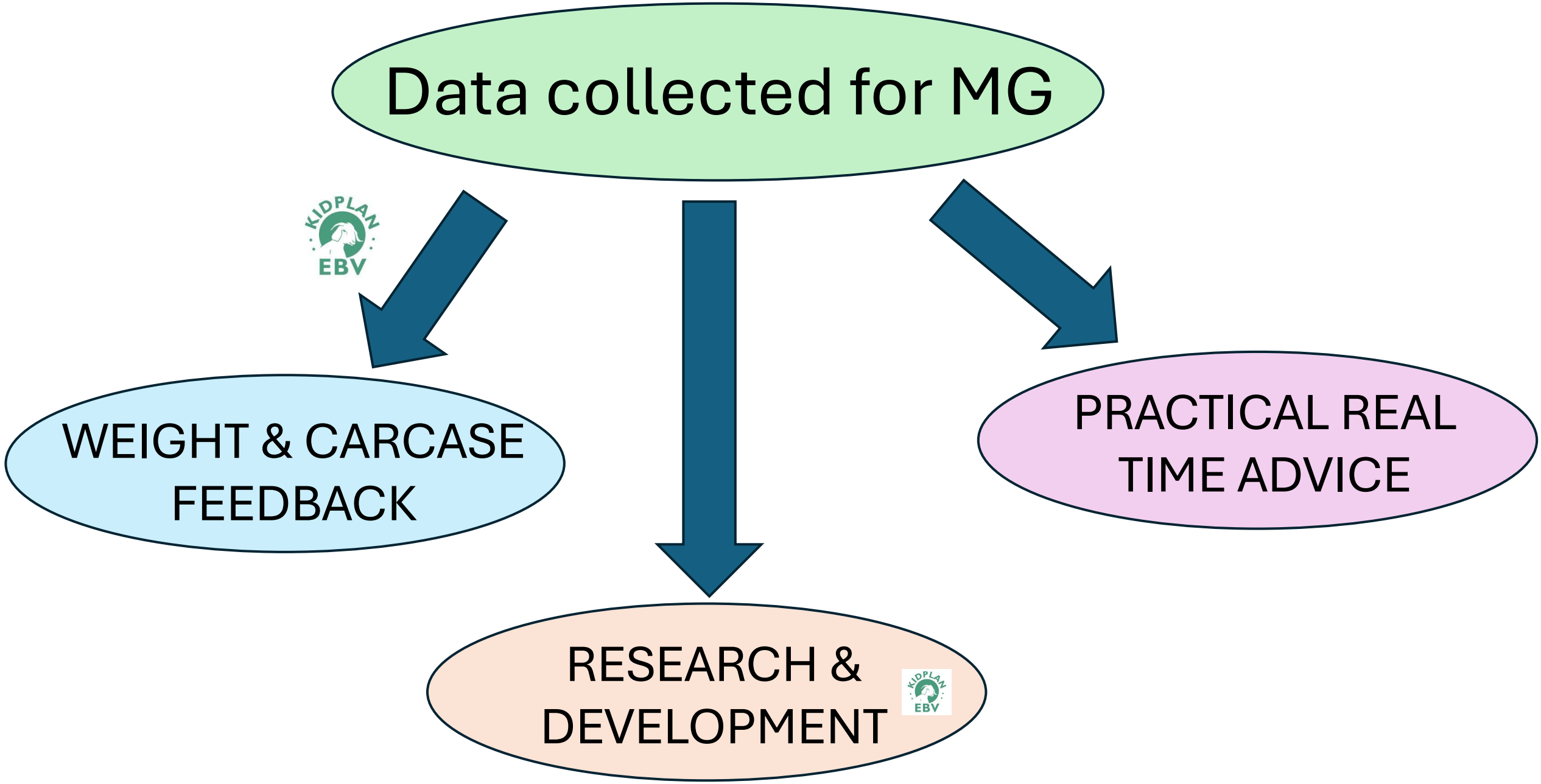
E&A plan for full impact







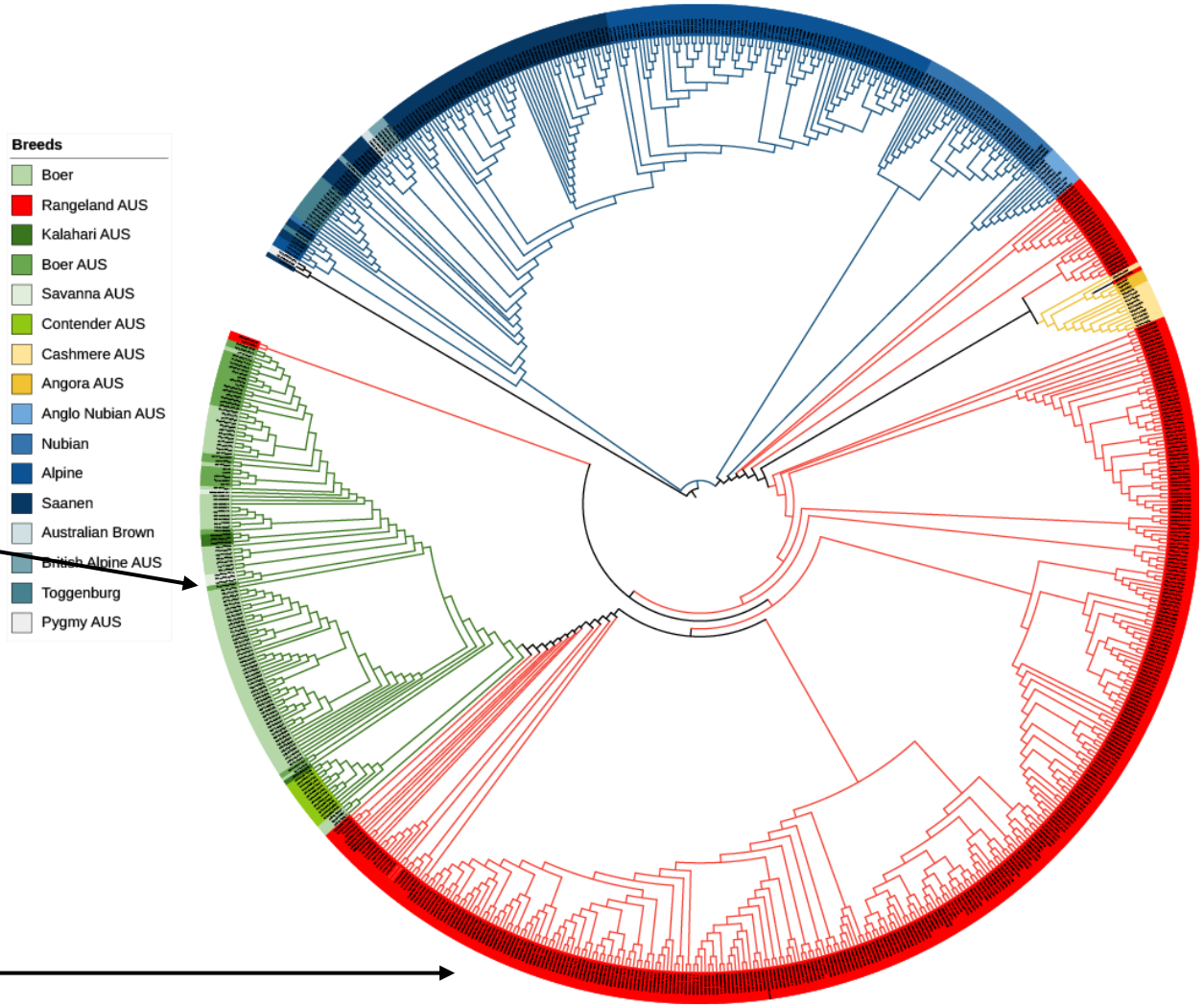


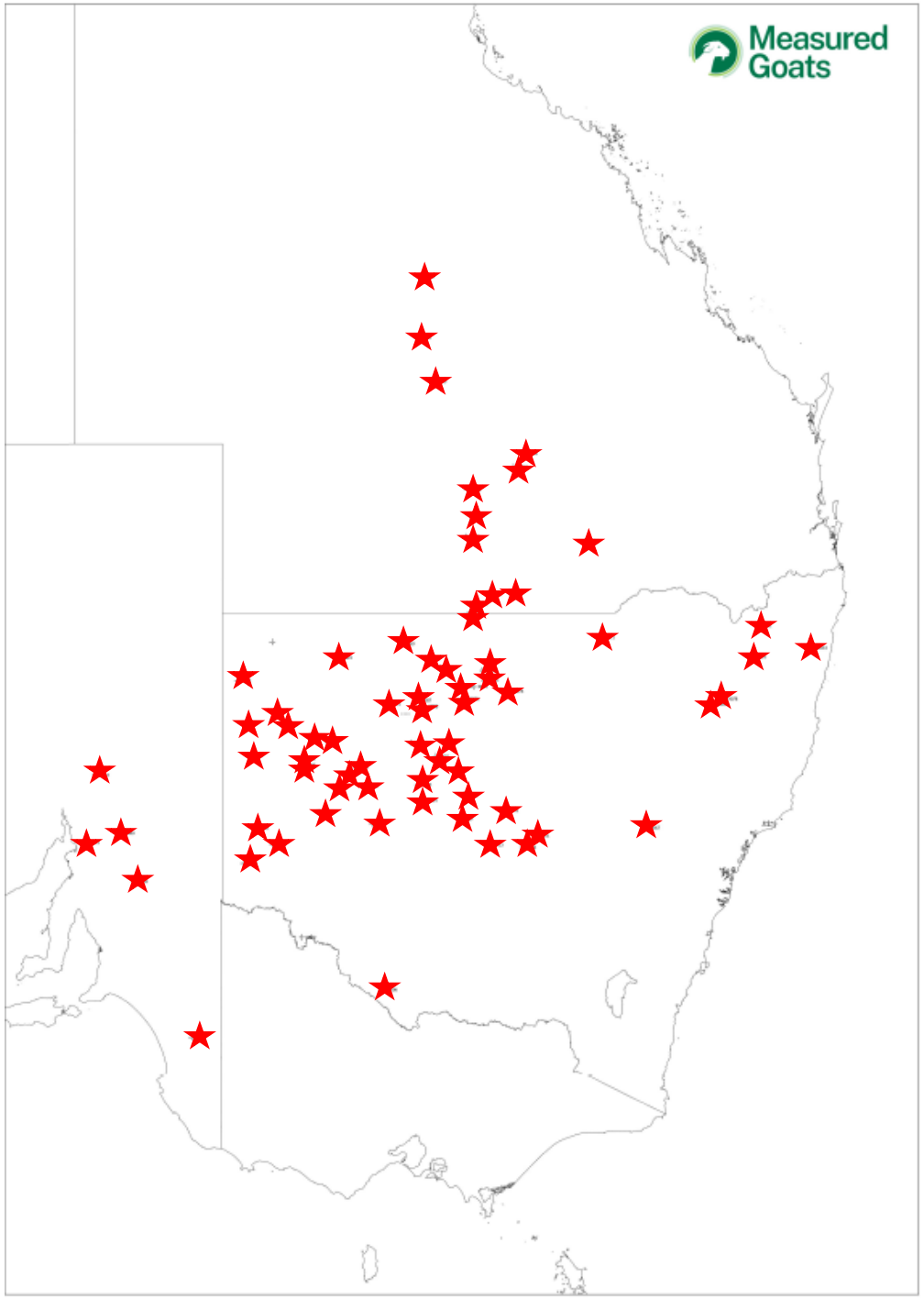

Data collected for MG
KIDPLAN EBV
WEIGHT & CARCASE FEEDBACK
RESEARCH & DEVELOPMENT
KIDPLAN EBV
PRACTICAL REAL TIME ADVICE

Breeds

Australian Boer, Kalahari, Savanna, Contender goats exhibit 90% genetic similarity

Rangelands are VERY genetically diverse





All Rangeland buck sources

Increasing profitability

Currently, goat producers are paid on $/CWT

How do I maximise $/ha in my goat enterprise?

What levers can I pull right now?



How do we know who will breed heaviest?

PWWT BV				
+1.2kg	-10.2kg	-5.4kg	+1.5kg	+2.4kg

LIFETIME CARCASE WEIGHT DIFFERENCE IN PROGENY COMPARED TO AVERAGE RANGELAND BUCK (-2.8KG PWT)				
+250kg	-463kg	-163kg	+269kg	+325kg

LIFETIME CARCASE VALUE DIFFERENCE IN PROGENY COMPARED TO AVERAGE RANGELAND BUCK				
+$1750	-$3238	-$1138	+$1881	+$2275


1127


1208


0875


1082


1106

$6500 range

How do we know who will breed heaviest?

PWT BV				
0.0kg	+9.2kg	-1.4kg	+7.7kg	+3.6kg

LIFETIME CARCASE WEIGHT DIFFERENCE IN PROGENY COMPARED TO AVERAGE MEAT BUCK (+3.4kg PWT)				
-213kg	363kg	-300kg	+269kg	+13kg

LIFETIME CARCASE VALUE DIFFERENCE IN PROGENY COMPARED TO AVERAGE RANGELAND BUCK				
-$1488	$2538	-$2100	+$1881	+$88



0834



1231



6167



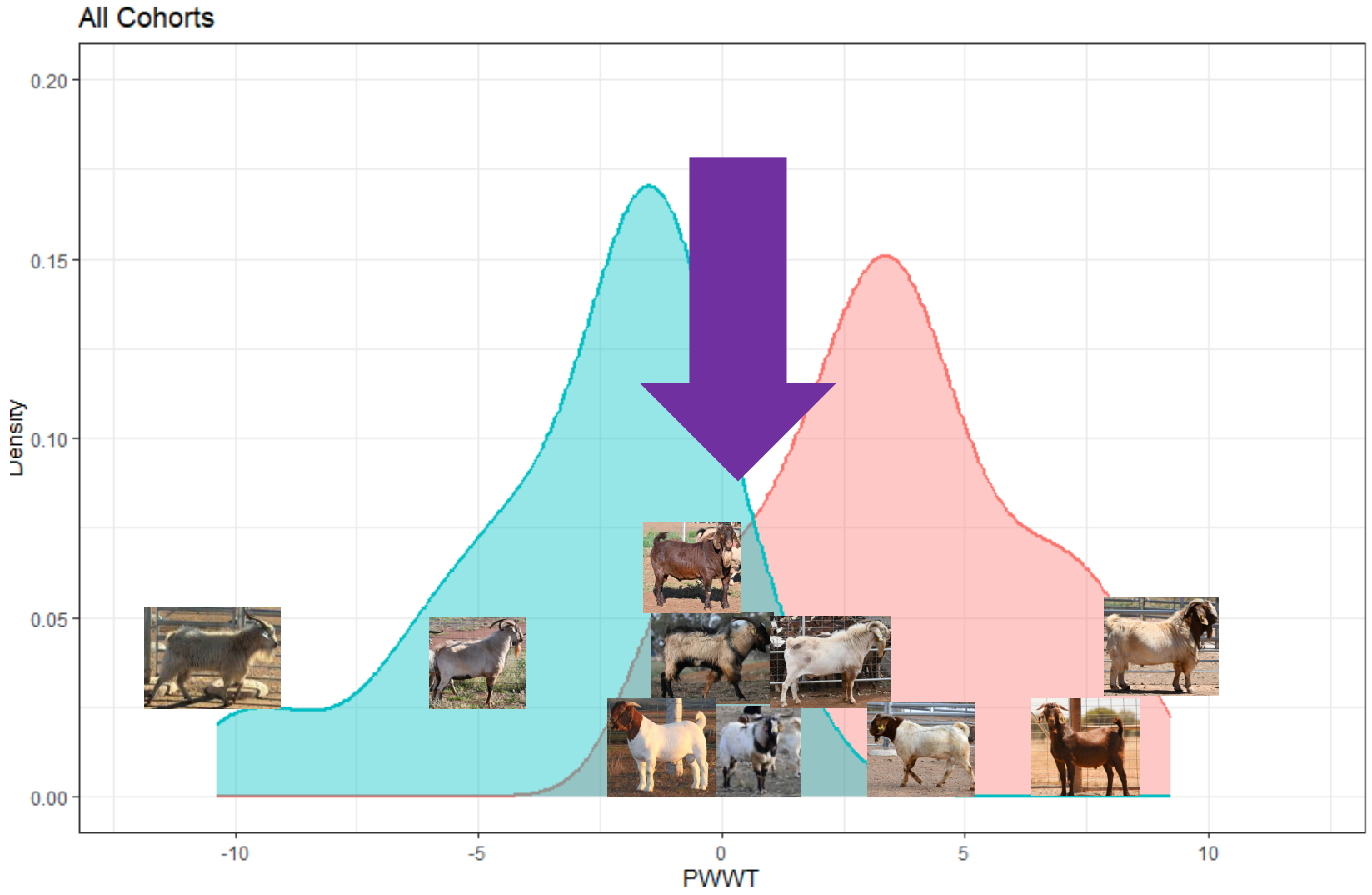
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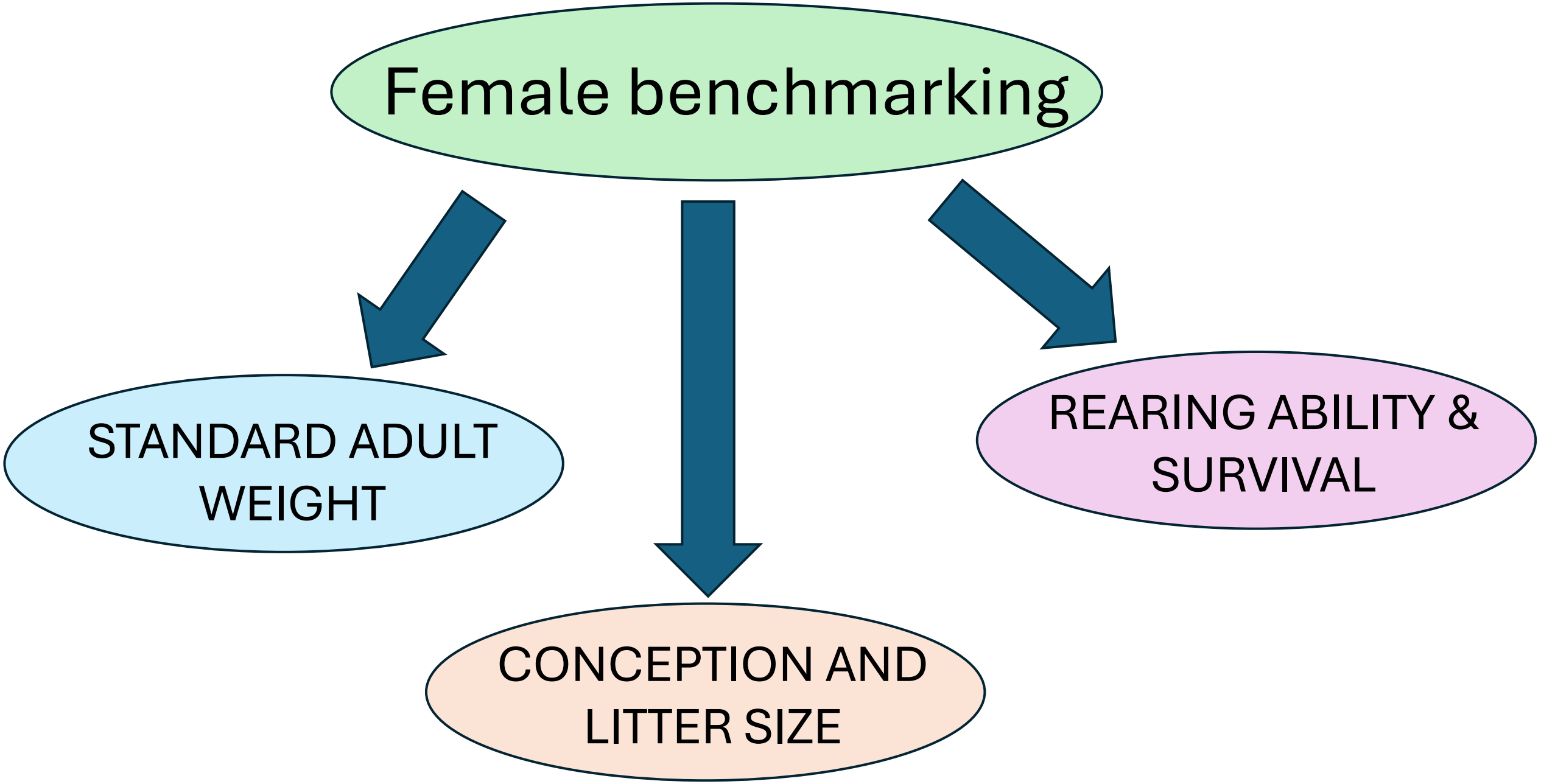
$5500 range

WEIGHT & CARCASE FEEDBACK



85 Meat sires

75 Rangeland sires


Female benchmarking
STANDARD ADULT WEIGHT
CONCEPTION AND LITTER SIZE
REARING ABILITY & SURVIVAL

How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN CS	n	JOIN WT
MMMM	3.6	362	59.2
F1	3.5	221	49.8
RRRR	3.4	187	38.7

20kg range at similar CS



How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN CS	n	JOIN WT	CONC
MMMM	3.6	362	59.2	84%
F1	3.5	221	49.8	86%
RRRR	3.4	187	38.7	88%

Little difference in conception



How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN CS	n	JOIN WT	CONC	LS WET
MMMM	3.6	362	59.2	84%	208%
F1	3.5	221	49.8	86%	193%
RRRR	3.4	187	38.7	88%	177%

30% range



How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN CS	n	JOIN WT	CONC	LS WET	DRA
MMMM	3.6	362	59.2	84%	208%	62%
F1	3.5	221	49.8	86%	193%	74%
RRRR	3.4	187	38.7	88%	177%	78%

16% range



How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN WT	CONC	LS WET	DRA	KW:WD %
MMMM	59.2	84%	208%	62%	129%
F1	49.8	86%	193%	74%	142%
RRRR	38.7	88%	177%	78%	138%

F1 and Rangeland better than Meat despite higher litter sizes



How did cohort 1 breeds compare in first parity?

DOE BREED	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %
MMMM	59.2	84%	208%	62%	129%	108%
F1	49.8	86%	193%	74%	142%	122%
RRRR	38.7	88%	177%	78%	138%	121%

F1 and Rangeland better than Meat does



What happens if I join does to meat bucks?

CROSS
MMxMM
MMxF1
MMxRR



"What about us?" – Francois Toupe

CROSS
MMxMM
MMxF1
MMxRR
RRxRR





Weaning weight difference

CROSS	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %	WWT
MMxMM	59.2	84%	208%	62%	129%	108%	19.2
MMxF1	49.8	86%	193%	74%	142%	122%	18.5
MMxRR	38.7	88%	177%	78%	138%	121%	17
RRxRR	38.7	88%	177%	78%	138%	121%	14.4

Thanks Sam!



Weaning weight per DSE joined

CROSS	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %	WWT	WWT/ DSEJ
MMxMM	59.2	84%	208%	62%	129%	108%	19.2	17.5
MMxF1	49.8	86%	193%	74%	142%	122%	18.5	22.8
MMxRR	38.7	88%	177%	78%	138%	121%	17	26.7
RRxRR	38.7	88%	177%	78%	138%	121%	14.4	22.6



MMxRR best because of Rangeland smaller adult weight, better doe rearing ability and growth of meat sires

Carcase value at weaning per DSE joined

CROSS	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %	WWT	WWT/DSEJ	$/DSEJ_W
MMxMM	59.2	84%	208%	62%	129%	108%	19.2	17.5	$67
MMxF1	49.8	86%	193%	74%	142%	122%	18.5	22.8	$87
MMxRR	38.7	88%	177%	78%	138%	121%	17	26.7	$102
RRxRR	38.7	88%	177%	78%	138%	121%	14.4	22.6	$87



MMxRR best because of Rangeland smaller adult weight, better doe rearing ability and growth of meat sires

RRxRR and MMxF1 level

Carcase value at post-weaning per 5000 DSE joined

CROSS	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %	WWT	WWT/DSEJ	$/DSEJ_W	$/50 DSE_W	$/5000 DSE_P	$/5000 DSE_P
MMxMM	59.2	84%	208%	62%	129%	108%	19.2	17.5	$67	$3,365	$5,048	$504,816
MMxF1	49.8	86%	193%	74%	142%	122%	18.5	22.8	$87	$4,369	$6,554	$655,417
MMxRR	38.7	88%	177%	78%	138%	121%	17	26.7	$102	$5,119	$7,678	$767,797
RRxRR	38.7	88%	177%	78%	138%	121%	14.4	22.6	$87	$4,336	$6,504	$650,369



$263k range

Carcase value at post-weaning per 5000 DSE joined

CROSS	JOIN WT	CONC	LS WET	DRA	KW:WD %	KW:DJ %	WWT	WWT/DSEJ	$/DSEJ_W	$/50 DSE_W	$/5000 DSE_P	$/5000 DSE_P	MM x MM compare
MMxMM	59.2	84%	208%	62%	129%	108%	19.2	17.5	$67	$3,365	$5,048	$504,816	100%
MMxF1	49.8	86%	193%	74%	142%	122%	18.5	22.8	$87	$4,369	$6,554	$655,417	130%
MMxRR	38.7	88%	177%	78%	138%	121%	17	26.7	$102	$5,119	$7,678	$767,797	152%
RRxRR	38.7	88%	177%	78%	138%	121%	14.4	22.6	$87	$4,336	$6,504	$650,369	129%



MMxRR best
RR & F1 second
MMxMM long way back

SIRE2	DAUGHTERS	JOIN WT	DSE EQIV	DSE_LACT	CONC	LS WET	DRA	KW:WD%	KW:DJ%	KG WEAN / KID	WWT/DSEJ	$/DSEJ_W	$/50 DSE_W	$/50 DSE_P	$/50 DSE_P_L
28	9	45.7	0.91	3.2	89%	213%	94%	200%	178%	24.4	47.6	$ 160	$ 7,991	$ 11,986	$ 35,959
23	19	40.4	0.81	2.9	84%	188%	87%	163%	137%	24.2	41.0	$ 138	$ 6,886	$ 10,329	$ 30,988
22	34	38.1	0.76	2.8	88%	183%	80%	147%	130%	23.8	40.6	$ 136	$ 6,823	$ 10,234	$ 30,703
1	7	55.6	1.11	3.7	100%	200%	86%	171%	171%	26.2	40.4	$ 136	$ 6,788	$ 10,182	$ 30,547
30	38	42.4	0.85	3.0	95%	200%	74%	148%	140%	24.3	40.1	$ 135	$ 6,738	$ 10,106	$ 30,319
19	21	53.6	1.07	3.6	95%	195%	83%	161%	153%	26.1	37.3	$ 125	$ 6,260	$ 9,390	$ 28,170
24	25	37.0	0.74	2.7	88%	164%	81%	132%	116%	23.6	37.0	$ 124	$ 6,223	$ 9,334	$ 28,002
27	10	40.1	0.80	2.9	80%	188%	81%	152%	122%	24.3	37.0	$ 124	$ 6,210	$ 9,315	$ 27,945
25	26	42.9	0.86	3.1	88%	209%	69%	143%	127%	24.5	36.2	$ 122	$ 6,083	$ 9,124	$ 27,372
33	43	42.1	0.84	3.0	93%	168%	80%	134%	124%	24.4	36.1	$ 121	$ 6,057	$ 9,085	$ 27,256
32	10	41.5	0.83	3.0	80%	213%	71%	150%	120%	24.6	35.6	$ 120	$ 5,983	$ 8,974	$ 26,922
11	35	56.1	1.12	3.8	97%	206%	74%	152%	147%	26.0	34.2	$ 115	$ 5,743	$ 8,614	$ 25,843
26	19	40.8	0.82	2.9	89%	171%	74%	127%	113%	24.0	33.3	$ 112	$ 5,602	$ 8,403	$ 25,208
16	23	52.3	1.05	3.5	87%	200%	75%	150%	130%	26.1	32.6	$ 109	$ 5,469	$ 8,203	$ 24,608
13	14	54.4	1.09	3.7	86%	192%	83%	158%	136%	25.8	32.2	$ 108	$ 5,417	$ 8,126	$ 24,378
29	20	40.0	0.80	2.9	80%	169%	79%	134%	107%	24.1	32.2	$ 108	$ 5,409	$ 8,114	$ 24,343
34	9	35.5	0.71	2.6	78%	171%	69%	119%	92%	24.0	31.2	$ 105	$ 5,247	$ 7,871	$ 23,614
7	47	52.2	1.04	3.5	94%	182%	73%	132%	124%	26.1	30.9	$ 104	$ 5,198	$ 7,797	$ 23,390
5	19	51.3	1.03	3.5	84%	219%	66%	144%	121%	26.0	30.7	$ 103	$ 5,154	$ 7,730	$ 23,191
AVE	**741**	**49.9**	**1.00**	**3.4**	**86%**	**197%**	**69%**	**136%**	**117%**	**26.0**	**30.4**	**$ 102**	**$ 5,111**	**$ 7,667**	**$ 23,002**
17	20	56.1	1.12	3.8	80%	213%	76%	163%	130%	26.2	30.4	$ 102	$ 5,109	$ 7,664	$ 22,992
14	27	53.0	1.06	3.6	96%	208%	59%	123%	119%	25.9	28.9	$ 97	$ 4,863	$ 7,295	$ 21,885
8	41	52.5	1.05	3.5	90%	186%	68%	126%	114%	26.1	28.4	$ 95	$ 4,764	$ 7,146	$ 21,437
18	18	58.3	1.17	4.0	94%	224%	54%	121%	114%	26.4	25.9	$ 87	$ 4,348	$ 6,522	$ 19,566
21	20	51.3	1.03	3.5	85%	194%	62%	120%	102%	25.9	25.8	$ 87	$ 4,327	$ 6,490	$ 19,470
20	31	57.9	1.16	3.9	84%	196%	67%	132%	111%	26.3	25.2	$ 85	$ 4,227	$ 6,340	$ 19,020
12	17	55.1	1.10	3.7	76%	192%	64%	123%	94%	26.1	22.2	$ 75	$ 3,737	$ 5,606	$ 16,817
2	6	59.2	1.18	4.0	83%	240%	50%	120%	100%	26.0	21.9	$ 74	$ 3,684	$ 5,527	$ 16,580
31	20	48.5	0.97	3.3	75%	167%	68%	113%	85%	24.6	21.6	$ 72	$ 3,621	$ 5,431	$ 16,293
6	7	52.4	1.05	3.5	71%	200%	60%	120%	86%	25.9	21.2	$ 71	$ 3,567	$ 5,350	$ 16,051
15	18	59.6	1.19	4.1	89%	225%	47%	106%	94%	26.3	20.8	$ 70	$ 3,499	$ 5,248	$ 15,745
3	33	54.6	1.09	3.7	82%	167%	62%	104%	85%	26.3	20.4	$ 69	$ 3,435	$ 5,153	$ 15,458
9	13	59.6	1.19	4.1	92%	225%	44%	100%	92%	26.2	20.3	$ 68	$ 3,412	$ 5,118	$ 15,354
4	30	60.8	1.22	4.2	90%	219%	44%	96%	87%	26.4	18.8	$ 63	$ 3,155	$ 4,733	$ 14,199
10	12	56.2	1.12	3.8	75%	200%	47%	95%	71%	26.2	16.6	$ 56	$ 2,785	$ 4,178	$ 12,533

$ VALUE PWT PER 50 DSE JOINED LIFETIME

$23000 RANGE

RANGELAND BETTER WITH SOME OVERLAP

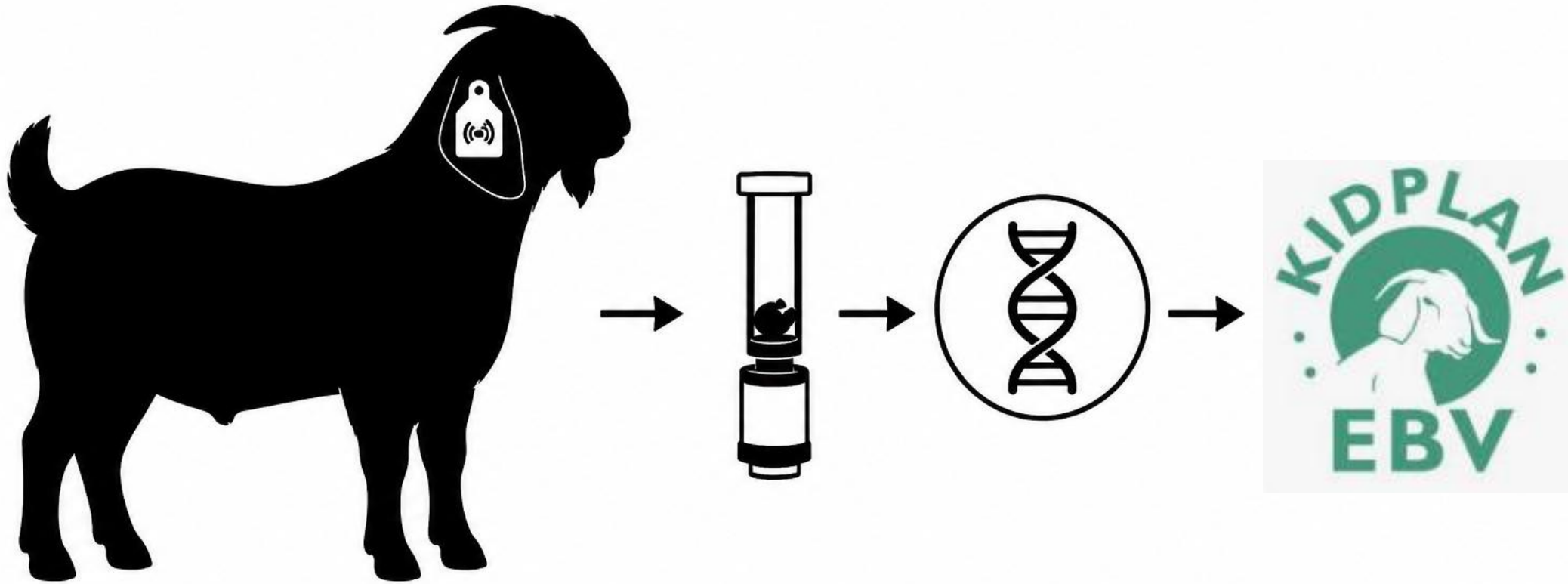
To summarise

Don’t undervalue the Rangeland Doe!



What is the vision?

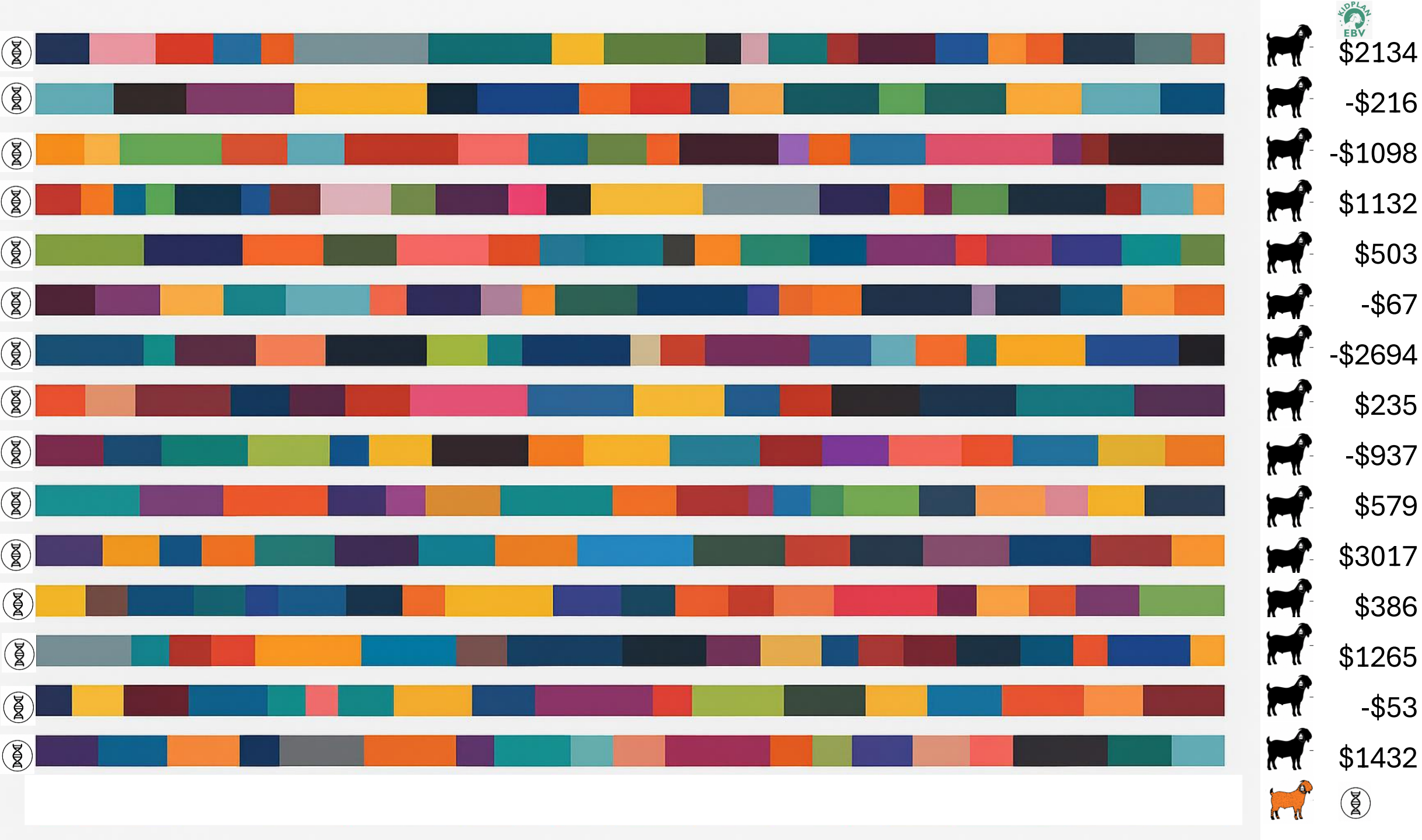



KIDPLAN
EBV



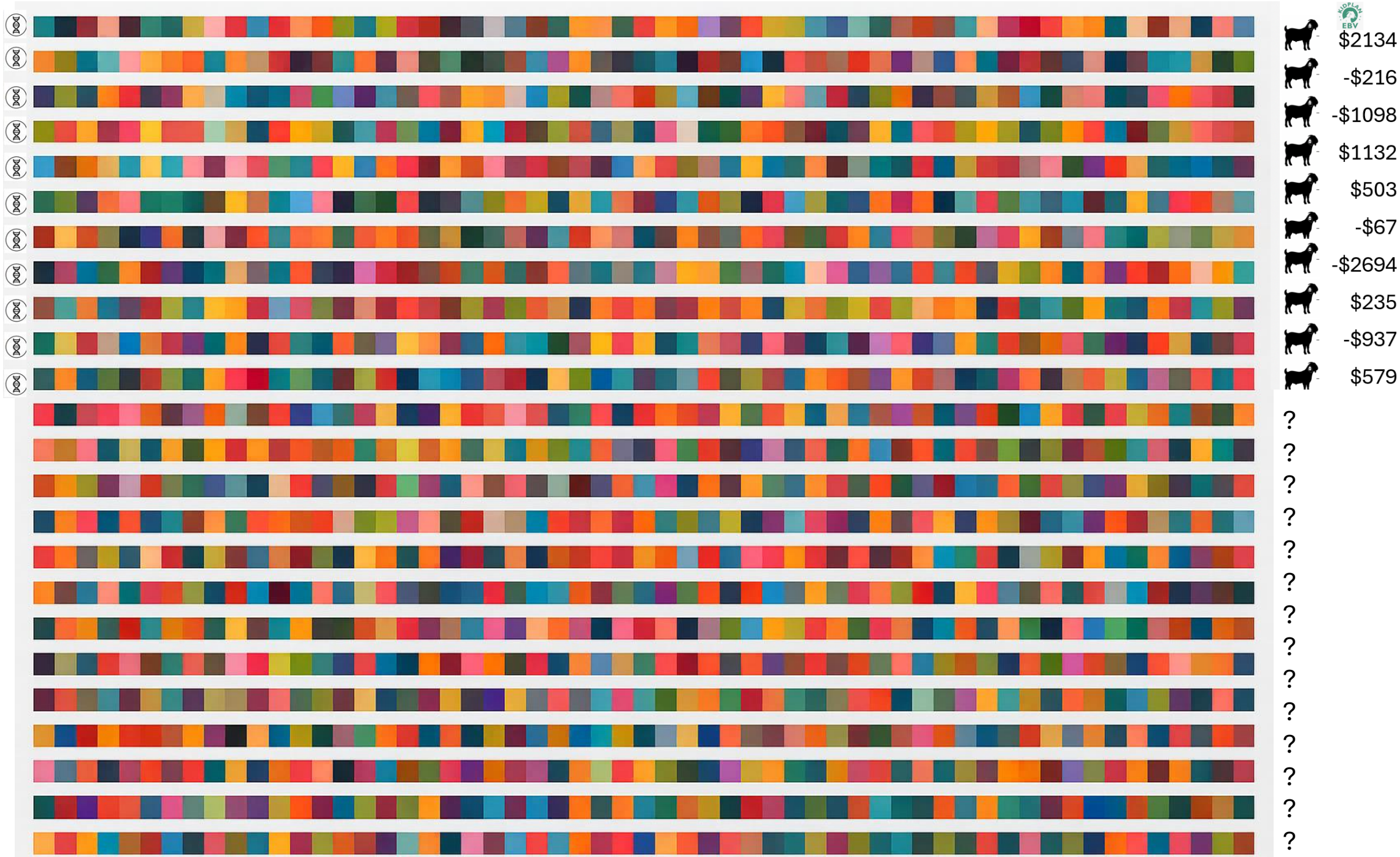
KIDPLAN EBV

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Breeding your own bucks nucleus

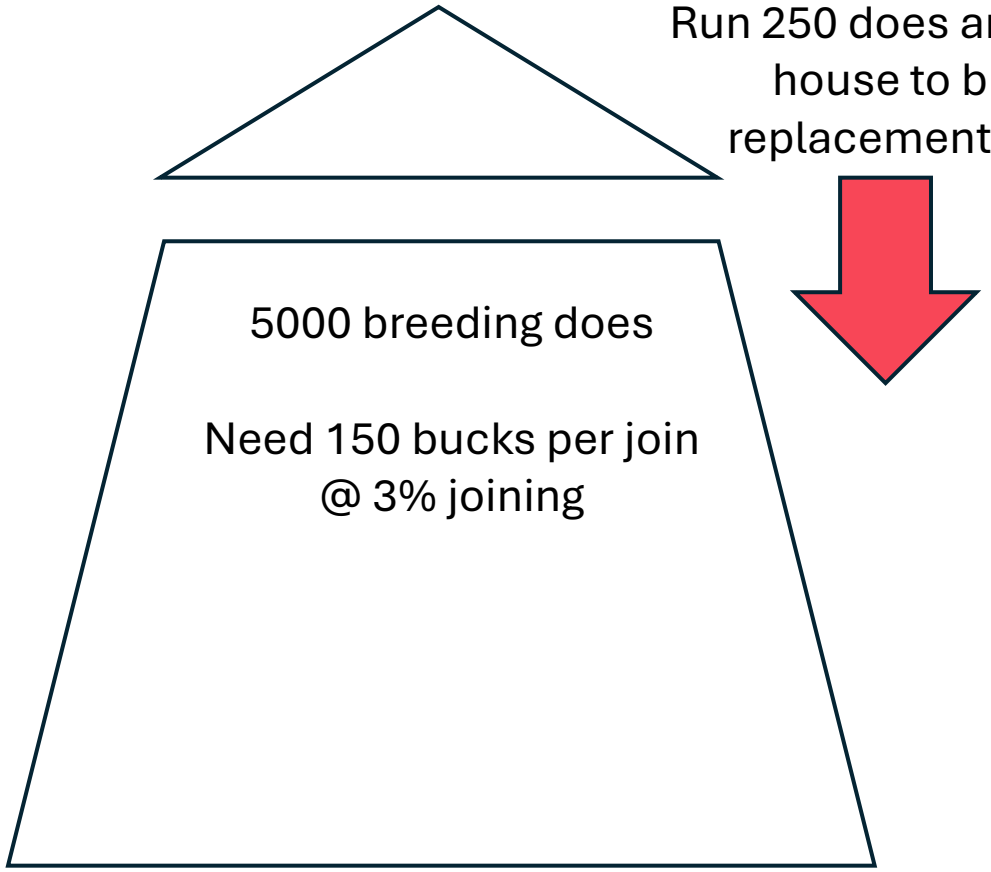


5000 breeding does

Need 150 bucks per join
@ 3% joining

Breeding your own bucks nucleus





Before breeding, physical culling, then genomic test

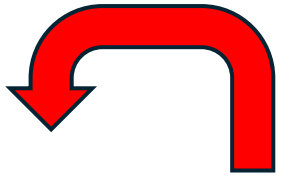
Breeding your own bucks nucleus





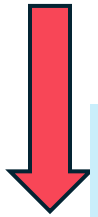
Run 250 does around the house to breed replacement bucks





Select highest $ bucks to sire next nucleus progeny

Before breeding, physical culling, then genomic test



Cull low $ bucks
Breed from highest bucks

Maternal cost-benefit $75 test

% SELECTED	GENOMIC COST / SELECTED BUCK	RETURN ON INVESTMENT RANGELAND	RETURN ON INVESTMENT MMMM
10%	$ 750	$ 3,792	$ 5,866
25%	$ 300	$ 3,518	$ 4,837
50%	$ 150	$ 2,426	$ 3,254
NO GS	$ -	$ -	$ -

Summing up

- 36 months in
- 65% done iteration 1
- Genetics = profitability
- Rangeland does rule!



Francois Toupee

NSW GOVERNMENT Department of Primary Industries and Regional Development
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