



# BREEDING STRATEGIES

ROBERT GANE - CANCHONES

FEBRUARY 2015



# Breeding Strategies

**Setting your breeding goals**

**Determining strengths and weaknesses of the dam**

**Clarifying sire selection criteria**

**Progeny testing**

**Evaluation pre potent characteristics of both males & females**

**Hidden treasures - Disappointments**

**Line breeding options - Wright Co-Efficient of Inbreeding**

**The role of the show ring in your breeding program**

**Mating and Health Issues**



# Definition / Terms

- \* Phenotype
- \* Genotype
- \* Line Breeding





# Breeding Goals

- \* Your passion
- \* Fleece characteristics
- \* Frame / body
- \* Marketing plan
- \* Size of herd
- \* Document
- \* Agree





# Evaluation of the dam

- \* Pedigree - genotype
- \* Progeny
- \* Fibre data
- \* Growth rate
- \* Fertility
- \* Gestation predictability
- \* Mothering ability
- \* Show Results ?





# Sire Selection Criteria

- \* Pedigree
- \* Progeny
- \* Fibre / Frame
- \* Show results
- \* Amplify dam's strengths
- \* Correct dam's weaknesses
- \* IAR Database analysis





# Progeny Testing

- \* Review your progeny
- \* Review others progeny
- \* Sires progeny class
- \* Phenotype / Genotype





# Evaluation of mating

- \* Dam strength / weakness
- \* Sire strength / weakness
- \* Progeny characteristics
- \* Pre potent characteristics
- \* Form





ALPACA EVALUATION

Name of Animal:\_\_\_\_\_DOB: \_\_\_\_\_ Tag :\_\_\_\_\_

Sire:\_\_\_\_\_Dam:\_\_\_\_\_

Date of Inspection:\_\_\_\_\_

HEAD

	YES	NO
Neatly formed face/muzzle		
Normal ears		
Normal eyes		
Normal jaw		
Normal teeth		
Comments:		

BODY

	YES	NO
Strong boned solid frame		
Normal length neck		
Straight tail covering genitalia		
Normal height		
Normal weight		
Good body score		
Firm upright pasterns		
Well formed feet/2 toes		
Good movement/even stride		
Good breadth (chest/rear)		
Strong straight back		
Strong straight legs		
Comments:		

REPRODUCTIVE

	YES	NO
Normal udder		
Normal teats (4)		
Normal testicles		
Comments:		

FLEECE (on a scale of 1-5) (1= lowest)

	1	2	3	4	5
Density					
Fineness					
Handle					
Guard hair					
Head coverage					
Leg coverage					
Staple formation					
Staple length					
Uniformity of colour					
Uniformity of length					
Uniformity of micron					
Lack of Tipping					
Crimp frequency					
Crimp amplitude					
Brightness / Lustre					

FIBRE TEST

	Results
Micron	
Standard Deviation	
CV	
Spinning Fineness	
Comfort Factor	
Curvature	

MISCELLANEOUS COMMENTS:

Temperament:



Breeding Performance - Pre potent characterists

Sire	Strengths	Weaknesses
Dam		
Progeny		
Sire	Strengths	Weaknesses
Dam		
Progeny		





**SIRE**





**DAM**





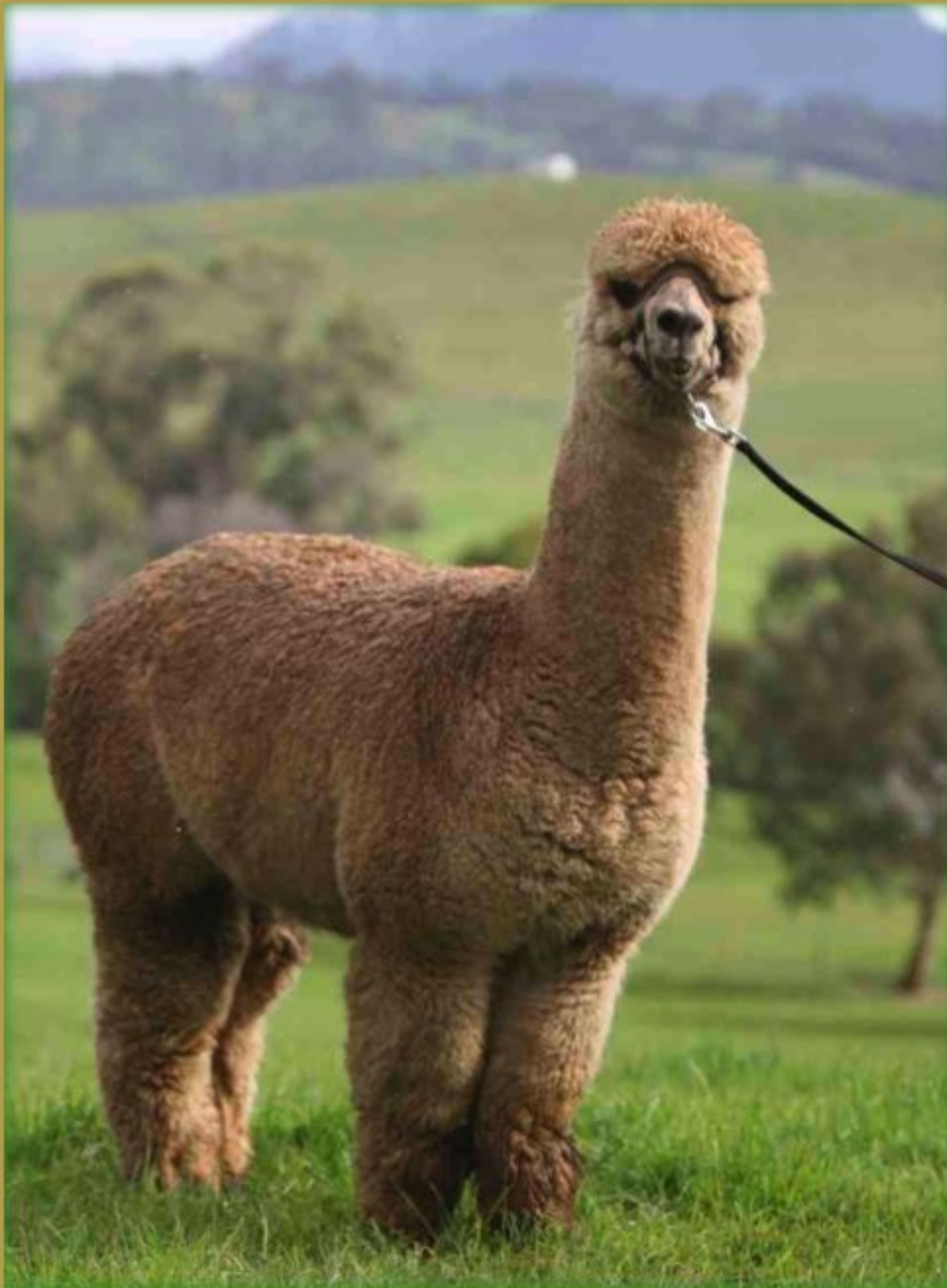
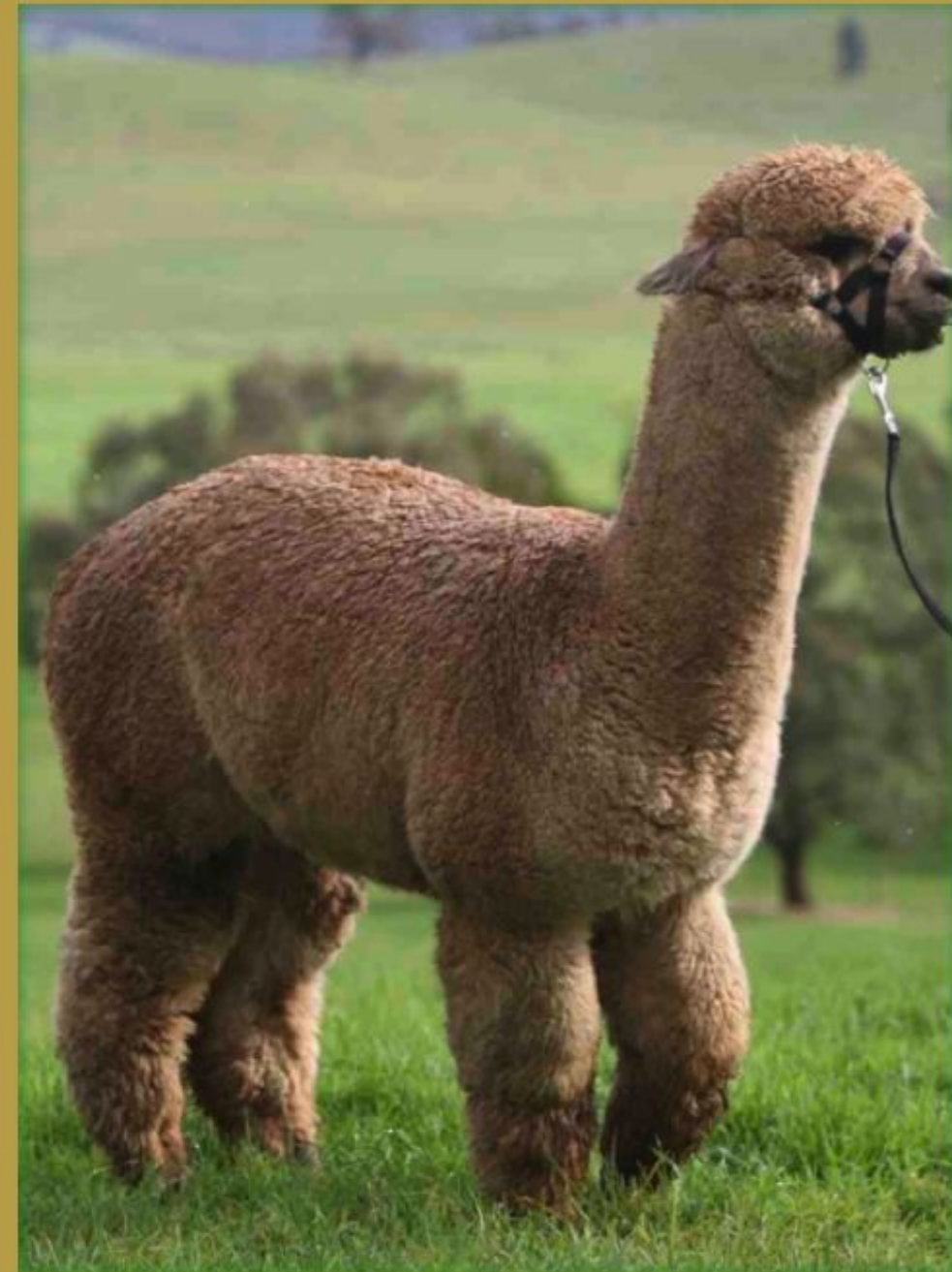
**PROGENY**



## Breeding Performance - Pre potent characterists

Sire	Strengths	Weaknesses
Rising Sun	Fines , Dense	Not black
	Substance of bone, excellent conformation	Some primary fibres
	Long staple length	
	Huge cutting fleece	
	Great temperament	
Dam		
Zeste	Excellent true black	Could be finer
	Very sound confirmation	Want longer staple length
	High follicular density	Want to cut more
	No white fibres	
Progeny	Very fine	Some primary fibres
	Dense	
	Black	
	Excellent bone and conformation	
	No white or light fibres	















<b>Sire</b>	<b>Strengths</b>	<b>Weaknesses</b>
Rising Sun	Fine	Some primary fibres
	Dense	
	Long staple length	
	Hugh cutting fleece	
	Great temperament	
<b>Dam</b>		
Seventh Heaven	Fine, Dense	Some primary fibres in chest
	Even colour	Not suitable for MOET
	Excellent bone and conformation	Not big
Progeny	Fine	Some primary fibres in chest
	Dense	
	Long staple length	
	Excellent colour	
	Variable colour	
<b>Sire</b>	<b>Strengths</b>	<b>Weaknesses</b>







# Hidden Treasures

- \* Mismatch phenotype / genotype







**CANCHONES DALIMANIA**





**CANCHONES DIESEL PLUS**





**CANCHONES DEBONAIR**





**CANCHONES TSUNAMI**





**CANCHONES DRAMATIC**





**CANCHONES DRAMA**



Canchones

*fine black alpaca*

Canchones

Shearing Data by Animal

Year No.		Shearing Date	Fibre Weight (Kgs)				Sample Details					
			Grade 1	Grade 2	Grade 3	Total	SFW	Mean	SD	CV	SF	CF
Ear Tag: P062		Animal Name: Canchones Normandie - (S)TB										
2006		1-Dec-2006						27.40	5.50	20.00%	26.44	73.9%
2007		1-Dec-2007						27.60	4.90	17.60%	26.13	75.1%
2008		1-Oct-2008						27.60	5.10	18.50%	26.31	76.5%
		20-Mar-2009						26.50	4.80	18.00%	25.17	83.1%
2009		1-Oct-2009						28.60	5.70	20.10%	27.62	69.3%
		2-Oct-2009						27.60	5.00	18.30%	26.27	77.1%
2010		1-Oct-2010						27.40	5.10	18.70%	26.16	75.1%
2011		4-Oct-2011						27.30	4.90	18.00%	25.93	76.3%
2012		5-Oct-2012						27.70	4.90	17.60%	26.23	75.4%
2013		1-Oct-2013						27.60	5.40	19.40%	26.5	73.9%
2014		22-Sep-2014						28.30	5.60	19.70%	27.24	71.1%
		Average:						27.60	5.17	18.72%	26.36	75.2%
Overall		Average:						27.60	5.17	18.72%	26.36	75.2%



Canchones

*fine black alpaca*

Canchones

Shearing Data by Animal

Year No.	Shearing Date	Fibre Weight (Kgs)				Sample Details					
		Grade 1	Grade 2	Grade 3	Total	SFW	Mean	SD	CV	SF	CF
Ear Tag: P136		Animal Name: Canchones Navigateur - (S)TB									
2008	1-Oct-2008						17.80	3.80	21.50%	17.4	99.7%
	20-Mar-2009						15.40	3.70	23.90%	15.38	100.0%
2009	1-Oct-2009						18.70	3.20	17.00%	17.62	99.3%
	2-Oct-2009						18.40	3.20	17.30%	17.38	99.5%
2010	1-Oct-2010						17.90	3.10	17.60%	16.95	99.8%
2011	15-Sep-2011						17.90	3.30	18.60%	17.08	99.6%
2012	5-Oct-2012						18.30	3.10	17.10%	17.26	99.5%
2013	1-Oct-2013						18.90	3.70	19.60%	18.18	98.8%
Average:							17.91	3.39	19.08%	17.16	99.5%
Overall		Average:					17.91	3.39	19.08%	17.16	99.5%



Canchones

*fine black alpaca*

Canchones

Shearing Data by Animal

Year No.		Shearing Date	Fibre Weight (Kgs)				Sample Details					
			Grade 1	Grade 2	Grade 3	Total	SFW	Mean	SD	CV	SF	CF
Ear Tag:	123945	Animal Name:	Canchones Naomi - (S)MF									
2007		1-Dec-2007						19.10	3.70	19.60%	18.37	99.3%
2008		1-Oct-2008						18.20	3.20	17.60%	17.23	99.7%
2009		1-Oct-2009						19.70	4.00	20.00%	19.01	98.3%
		2-Oct-2009						19.00	3.60	18.90%	18.17	99.2%
Average:								19.00	3.63	19.03%	18.20	99.1%
Overall		Average:						19.00	3.63	19.03%	18.20	99.1%



# Disappointments

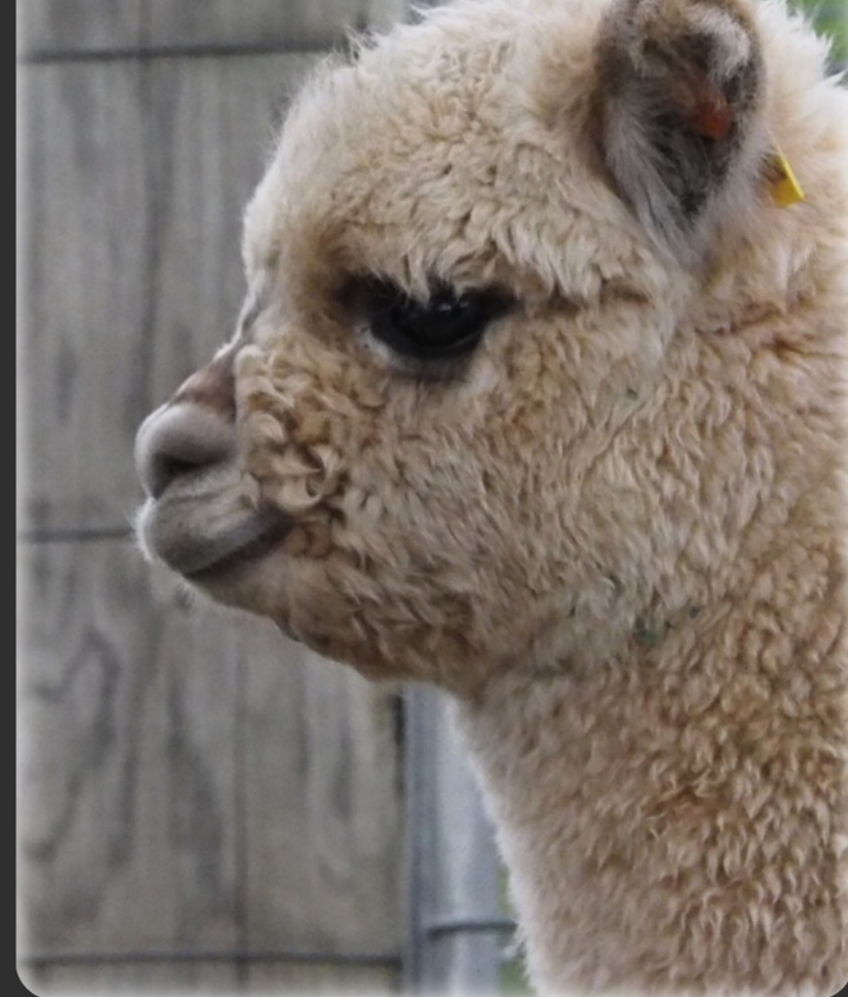
- \* Mismatch phenotype / genotype

















# Line Breeding

- \* Livestock standard
- \* Wright coefficient
- \* IAR
- \* Strengths & weaknesses
- \* Genetic suppression
- \* Outcross for vigour
- \* Examples





# Role of the show ring

- \* One judge's opinion
- \* 3 minutes
- \* Good bench mark
- \* Sires progeny
- \* Pen hopping





# Health & Mating Issues

- \* Age / weight
- \* Supplements
- \* Duration of matings
- \* Fertility measures
- \* Testicle size
- \* Problems - females
- \* Problems - males







**QUESTIONS**