

## Velvet Genetics

### group experiences

	Current situation	Issues
Craig	100% Velvet herd, 200 stags, some trophy Mainly home bred. Now considering next move	Reluctant to transport from South Island Concerns about 'closed genetic shop' in NZ
Jason	DeerSelect. Currently 3 members had velvet based herds Velvet traits are highly heritable	
Doug	Velvet large % of operation 770 stags including spikers. Cut off for retaining at 2yo=2.2kg	Red deer are small, Changed breeder to larger animals Lifting 2yo cut off for retention
Evan	350-400 velveting stags all red with large red hinds. Several sources of sire stags. 2yo cut off =2.5kg (25% of 2yo retained) Velvet 45% of income and 24% of farm area.	
Murray	360 velveters, wapiti stud, initially venison focused but now more focused on velvet.	Smaller gene pool than red velvet stags. To start putting velvet traits on DeerSelect.
Bruce	2500 stags Red, initially Rakaia then East Europe and English. 100 sires used per year, home bred. AI used.	To identify nucleus 300-400 high performing hinds. DNA?
David M	Elk stud. Venison is main priority but velvet a lot of stags. Red, velvet 600-800 hinds. some trophy Cutting 550 R2s, keep best 200. AI for 12 years, all deer	Getting balance right between venison and velvet. Avoid cyclical nature of velvet supply - flood market.
Dave L	Smaller scale. Wapiti As many males and females on DeerSelect. In 10 years, including velvet traits. increased eBV velvet 30 fold. 2yo velvet weights gone from about 2kg to 5.8kg	As improve performance need to reduce stocking rate
Dan Spiers		Retaining knowledge

### Group discussions and advice

#### 1 Heritability

Velvet traits highly heritable 80%. "What you see is what you get"  
Progress can be and has been very rapid

Need to get objective measures on DeerSelect  
Lack of herd that have registered on DeerSelect makes it less useful

## **2 Selection of replacement stags**

Keeping all male progeny to 2 years old.  
Not good correlation between spiker weights and mature weights  
2yo weight cut off can be set at a weight but also need to consider numbers. E.g. 2.0 to 2.5kg depending on current herd average  
25% replacement rate  
Buying in replacement stags

## **Selection of hinds**

Mothering up hinds to fawns or DNA testing  
Hinds can be registered on DeerSelect but need to have a certain amount of minimum data  
Takes a long time to assess hinds on the own progeny  
DeerSelect allows BVs to be generated based on brothers, uncles, cousins etc.

## **Using DeerSelect for velvet**

More accurate hind information  
Can select hinds at birth  
Shorter generation interval, faster genetic gain  
What to do with older hinds.  
Ensure objectivity

## **Knowledge lacking**

Profitability analysis - Focus on the figures, not antlers.  
Need to hear genetic advice multiple times  
Practical advice around age of herd for genetic progress and select replacements from young stock