Is profit important to you?

The key to being a successful sheep producer is productivity, and breeding more profitable sheep.

Profit can be derived from sheep as fibre, meat, offspring and surplus animals and need not focus on a single aspect alone. In fact, production is the sum of the value of wool sold, plus any offspring, plus the final sale of the animal itself. Looking deeper, wool income is impacted by both quantity and quality and thus the end result is market driven. Meat production may be the primary focus for the animal being raised as a prime or store lamb or secondary after having grown fleeces, raising lambs and having reached the productive end of life. Income may also be generated by the sale of surplus breeding ewes and influenced also by reaching market readiness sooner.

When trying to compare animals for productivity, it is important to consider both the animals own ability to produce, which is a product of its genetics and environment (feed etc), as well as the animals ability to pass this productive ability on to its offspring (genetics). The understanding of how an animal will breed is difficult to see and understand without significant observation and measurement. Analysis of visual and measured data by Sheep Genetics results in breeding values (ASBVs) and selection indexes, and helps guide users in their decision-making.

Indexes are an important tool to drive genetic improvement in ram breeding programs. Indexes combine multiple measured traits (breeding values) into a value that reflects a certain production emphasis. A range of traits are included which are of economic or functional importance. The index aims to improve profitability in commercial sheep enterprises[1].

Indexes are useful because they balance genetic improvement appropriately across a range of traits with the emphasis of each individual trait determined by its relative importance to a selection approach for a particular style of production system[1]. Within MerinoSelect, Lambplan and the Dohne analyses there are a number of different indexes. Matching the most appropriate index with your production system and breeding objectives is key to maximising your productivity.

Balancing production traits is important, because as mentioned previously, the economic return is the sum of all the sales less the costs. Focussing solely on wool will limit meat production and even fertility. Fertility is an important factor to consider, because it impacts the future generations in ewes returning to lamb, raising lambs to either sell or join the flock to continue the production cycle. Focussing primarily on growth and meat traits will negatively impact wool traits. Balancing the two production components, wool and meat, is key to maximising productivity and this point of balance is likely to be affected by market values.

Comparison between Merino or Poll Merino and Dohnes has been difficult in the past due to their separate analyses. This has allowed some generalisations and false information to be spread. Sire Evaluations have been particularly useful in openly allowing this comparison and relating it to production.

After acceptance of a ram into a sire evaluation, there is no hiding the results and the productivity of each animal. Genetic results are proven where all the different sires' offspring are raised on the same property and under the same climatic and feeding conditions.

Glen Holme have entered a number of sires into Merino Sire Evaluation. This gives us exceptional information on the individual as well as comparing the Dohne against Merinos and Poll Merinos for production. Recent results of the Balmoral 2019 Drop Sire Evaluation highlight Flock Breeding Values and Indexes show the Dohne a clear trait leader for Dual Purpose Plus index and well above average for the Merino Production Plus, Fibre Production Plus and Wool Production Plus indexes (Flock Breeding Values). Below is a table taken from the Sire Evaluation Site Report.

Table 2. AMSEA Index Values and Classer's Visual Grade

The index values reported are based on measured traits FBV performance with varying emphasis on fleece weight, fibre diameter, body weight, staple strength and worm egg count. See 'Index Options' (page 11) for more information on the indexes presented in the table below.

The highest performing sires for each trait (trait leaders) are highlighted by shading. Each sire is listed for Classer's Visual Grade and the same four indexes are reported at all site evaluations.

| Sire Code | Breeders flock, Sire name | Number of Progeny* | AMSEA Index Values | | | | Classer's Visual Grade¹ | |
			Dual Purpose Plus	Merino Production Plus	Fibre Production Plus	Wool Production Plus	Tops % A^	Culls % A
1	Anderson Poll, 170660	52	98	102	93	114	28	-10
2	Baderloo Poll, 150171	58	83	81	87	79	-4	10
3	Conrayn, MVB123	56	90	101	101	97	2	-8
4	Curlew, 170111	53	84	80	94	72	0	-12
5	Glen Holme, 162503 (Dohne)	56	138	125	115	121	-4	-10
6	Gunallo Poll, 170295	53	115	127	118	127	-7	-2
7	Jigsaw Farms, 160270	54	107	82	76	90	0	-6
8	Kerin Poll, 160137	41	111	130	118	134	-6	17
9	Kerin Poll, 171646	26	104	111	110	110	-7	14
10	Kerrsville, 166010	56	103	127	127	128	-5	0
11	Kia Ora, 150608 (Rex)	58	108	114	120	109	4	-8
12	Kiandra Poll, 160793	65	100	98	93	99	5	3
13	Kurra-Wirra, 170039	45	102	117	119	111	-9	2
14	Miramoona, 140012	58	115	109	110	110	10	-10
15	Moorundie Poll, NE73	56	113	113	104	118	-1	13
16	Mumblebone, 170709	64	103	63	62	66	-6	-1
17	Pendarra Poll, 160028	41	118	119	113	121	15	1
18	Trigger Vale Poll, 170929	48	68	56	52	68	-12	25
19	Turkey Lane, 170060	44	87	98	113	88	0	-9
20	Willera Poll, 175584	55	75	71	74	74	-2	-2
21	Yiddinga, 170576	44	78	76	95	63	2	-4
	Average performance	52	100	100	100	100	14	14

^ W = Weaning (42 to 120 days); P = Post Weaning (210 to 300 days); Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older).

¹Classer's Visual Grade is expressed as the percentage deviation of average Tops% and Culls%.

* Progeny No is the total progeny number for each sire at weaning.

We have consistently promoted the Dohne as a balanced mix of wool and lamb production. We have also clearly stated that our aim is to breed a balanced type of sheep. This incorporates elements including; fibre diameter, staple strength, clean fleece weight, fat and muscling, growth rates, fertility and weaning weights. We are extremely pleased that results from Sire Evaluations are proving this repeatedly.

Ultimately productivity and profitability of an enterprise is linked to functional and economic traits, many of which are listed above. Many traits can be observed, recorded and assessed, but not all have direct impact on productivity. Purchase price may not be a good indicator of future productivity. Other traits may be more dependent on the system – for example WEC (worm egg count) traits may be less important to flocks in dry pastoral areas compared with higher rainfall zones. Other traits such as FDCV (co-efficient of variance of Fibre Diameter) may be of little economic importance when wool is valued by fleece weight, yield and fibre diameter, with some bearing also on staple strength and length.

Breeding productive and profitable sheep is improved by having a clear understanding of your flocks breeding objective and aim, and by utilising tools such as Breeding Values and Selection Indexes. Investigate and search for sires that will improve your flock's productivity.

If you would like further information on the performance of Glen Holme Sires in Sire Evaluations, this information is publicly available. We are also happy to discuss this with you or provide you with information. Please contact us.

References

[1] *MERINOSELECT Indexes – A guide from Sheep Genetics. Balmoral 2019 Drop Post Weaning and Adult Assessments Sire Evaluation Site Report*