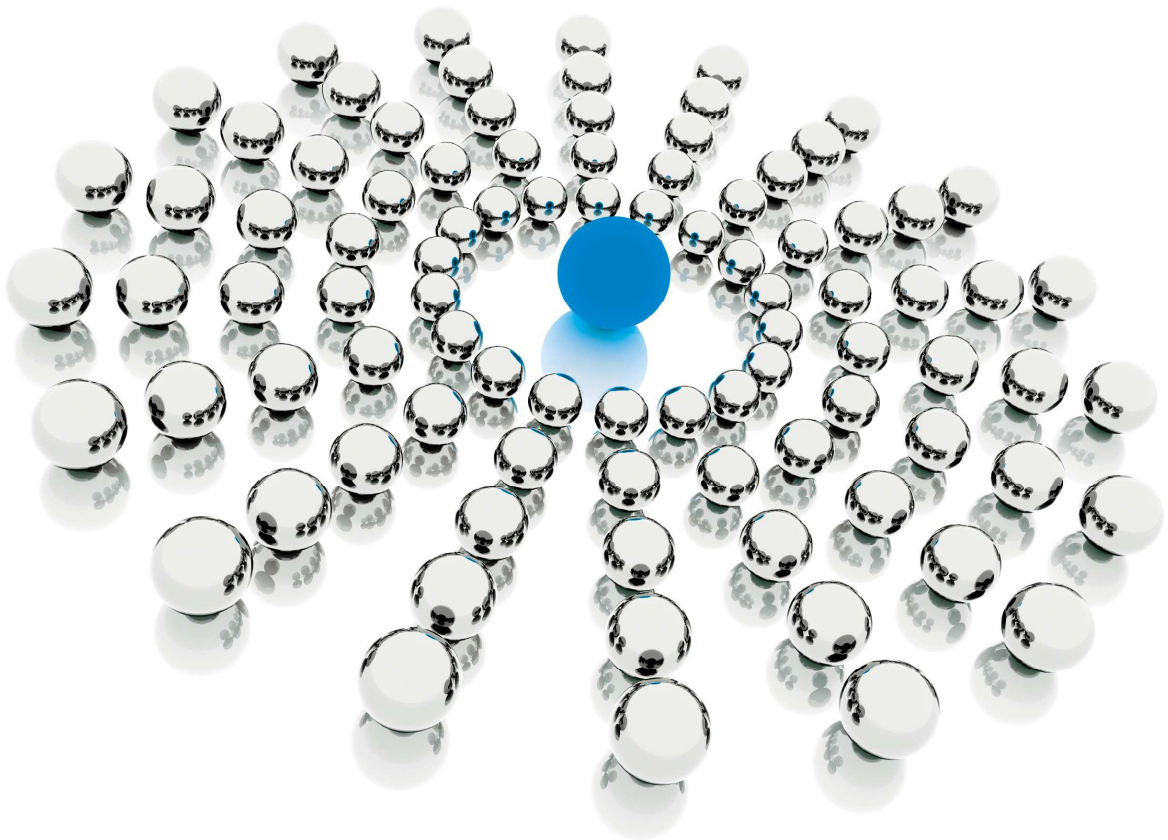
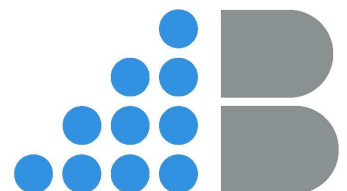


Abacus Accelerator™

profits, progress, diversity



ABACUSBIO LIMITED



Abacus Accelerator™

profits, progress, diversity

What is Abacus Accelerator?

We have developed a suite of services, which are designed to maximise your profits, increase your rate of genetic progress and safe guard you against inbreeding in your flock.

Our services have been developed by internationally recognised geneticists based at AbacusBio, in conjunction with Sheep Improvement Ltd (SIL).

AbacusBio is a Dunedin based company, which bridges science and business and as such, our services provide practical, easy to use solutions for your breeding business.

Benefits of Abacus Accelerator™

Increasing profits

- Customer service
- Selling more rams

Accelerator product range

- RamFocus
- Accelerator Sale-ability score
- R-AMP-Ram Accelerator Marketing Plan

Accelerating genetic progress.....

Genetic direction	Breeding scheme design
Analysis for improvement	Advanced diagnostics
International vision	Customised breeding objectives
Identify the leaders	Key ancestor summary

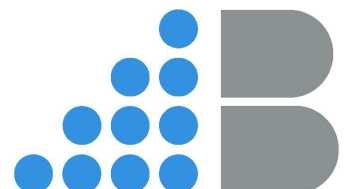
Enhancing genetic diversity....

Snapshot of where you are	Inbreeding diagnostics
Maximise genetic gain	ANI-MATE™
Specify matings	ANI-MATE Advanced™
Save time and increase flexibility	Accelerator relationship tables

Abacus Accelerator

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Abacus Accelerator™ products

Increasing profits

1. Accelerator Sale-ability score

Identify bloodlines which consistently result in saleable rams and eliminate rams and breeding ewes which don't deliver at sale time

2. R-AMP Ram Accelerator Marketing Plan

Develop and implement an effective marketing plan to help you sell more rams

3. RamFocus

Personalised ram indexes designed to suit specific ram buyer production systems

4. Accelerator news and e-reports

Every 6 months we will send you an [Accelerator News](#) report, keeping you up to date with how scientific and technical advances can help your breeding operation. As part of the being an Accelerator member you will also receive all your data in the form of [Accelerator e-reports](#) which are safe and easy to sort

Part of
Membership

Accelerating genetic gain.....

5. Breeding scheme design

Professional consultancy services and advice specific to your requirements

6. Advanced diagnostics

Get a health check on current recording and selection practices

7. Customised breeding objectives

Customised breeding objectives help you breed rams for niche markets or if you want to weight breeding traits differently to standard SIL weightings

8. Key ancestor summary

Detailed summaries of key animals and their descendants that have historically had a big impact on your flock

Minimising inbreeding and maintaining and enhancing genetic diversity

9. Inbreeding diagnostics

Keeps you up to date with changes in genetic diversity and inbreeding in your flock

10. ANI-MATE™

Reduces the risk of inbreeding and increases genetic diversity. We provide you with ready to draft mating lists which save time and increase flexibility

Part of
Membership

Part of
Membership

11. ANI-MATE Advanced™

Custom ANI-MATE mate selection and allocation solutions including; large flock logistics, multi-sire joining, managing genetic diversity; mating preferences

12. Accelerator relatedness table

More information at your fingertips to select and mate ewes using relatedness information presented in conjunction with standard SIL report information

Part of
Membership

Abacus Accelerator™

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Key Personnel



Peter Amer brings innovation, problem solving and analytical skills to the Accelerator team in the areas of animal breeding and statistical, genetic and economic analysis. His specialty areas include:

- sheep, beef, dairy, deer and aquaculture genetics
- statistical, genetic and economic analysis of breeding strategies
- breeding value prediction
- mate selection and allocation
- maximising genetic gain and minimising inbreeding
- economic benefits of using SNP technologies for identifying underlying cause of disease in sheep



Jude Sise brings her penchant for trouble shooting, analytical skills and practicality to the Accelerator team in the areas of genetics, modeling and software development. Her specialty areas include:

- practical application of DNA based tests in the livestock industry
- modeling cost effectiveness of applying new technologies to industry
- software development
- commercial test development



Neville Jopson has the unique ability to look at the whole picture while focusing on detail. At AbacusBio he works in the areas of breeding, genetics and technology. His areas of expertise include:

- measurement of body composition in live animals - ultrasound and CT scanning
- carcass classification
- integration of carcass traits into livestock breeding programmes
- employing modern genetic principles to improve animal selection
- statistical and economic modeling of technology applications in livestock industries
- key role in management of Meat & Wool NZ Central Progeny Test
- beef cattle feedlot data analysis and decision making



Tim Byrne is passionate about agricultural science, and works at AbacusBio in the areas of technology, genetic improvement and bio-economics with experience in both New Zealand and Europe. His specialty areas include:

- technology implementation in agricultural systems
- livestock breeding programme design and implementation
- bio-economic evaluation of breeding strategies
- extension and communication of agricultural science



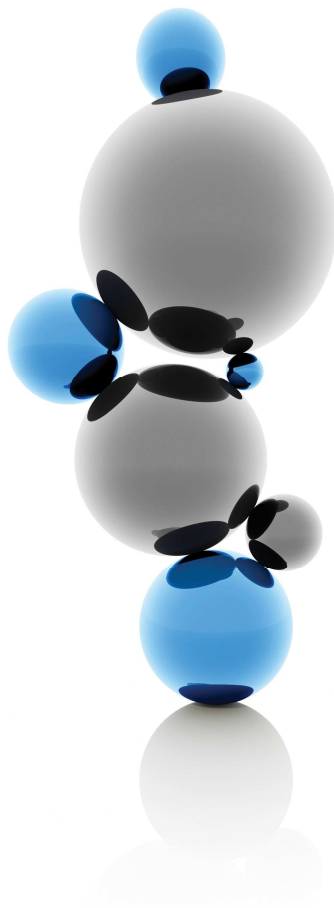
Jo Kerslake brings a 'can do' attitude to the AbacusBio team. She is an integrative thinker with a passion for farming and applied agricultural research. Her specialty areas include:

- Lamb survival
- Pregnancy and newborn physiology
- On-farm applied research
- Epidemiology

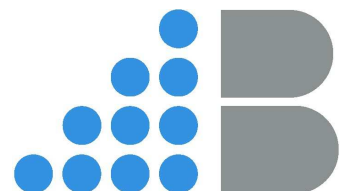
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Increasing Profits



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RamFocus

All ram buyers are different

Use RamFocus to customise the ram index system to suit your individual buyers

- * Rank your rams according to the production system required
- * Easy to keep records of rams sold, to who and at what price

The screenshot displays the RamFocus software interface. The main window, titled 'RamFocus Report', shows a 'MainReport' with a logo and 'RamFocus Ram Administrative-M Client/Property: Neville'. Below this is a table of ram data:

Ram ID	Sire of Ram	Relative value (\$)	Rank	* DPGM	* DPG	* DPMG
108/01	145/99	87	13	38	61	20
112/01	R76/99	0	106	-37	-57	-23
121/01	R76/99	87	12	106	160	37
125/01	VH193/99	53	45	127	195	50
127/01	145/99	39	65	41	66	23
139/01	999/99	17	92	73	119	40

To the right, a 'RamFocus Ram Sale Database' window shows a table of sales:

Cart Tag	Sire Tag	Sold	Culled	Purchaser	Price	Com
1/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	John Smith	500	
100/01	VH193/99	<input type="checkbox"/>	<input checked="" type="checkbox"/>			Bad f
101/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Bill Jones	850	
102/01	145/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Bill Smith	700	
104/01	VH193/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
106/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	John Jones	600	
108/01	145/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
111/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
112/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
113/01	VH193/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
114/01	VH193/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
120/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
121/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
124/01	VH193/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
125/01	VH193/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
127/01	145/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
135/01	R76/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

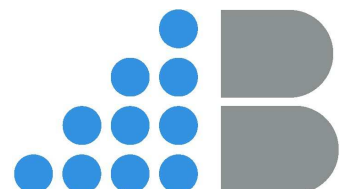
The 'RamFocus' window is open, showing 'Buyer details' for 'Jopson, Neville: Stonehenge'. The form includes fields for Name, Property, Address, and Town. It also has a 'Buyer details' section with a dropdown menu and a 'Save survey' button. The 'Parameters' tab is active, showing options for 'What is the intended ram purpose?' (35% female progeny retained), 'How long do you retain rams?' (1 year), and 'Average ewes mated per ram joined?' (100 ewes). The 'Calculate index' button is also visible.

Providing the best ram solutions

Abacus Accelerator

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What is RamFocus?

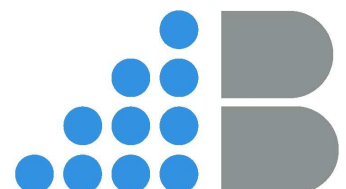
RamFocus is a software package designed to assist ram breeders in targeting rams to appropriate ram buyers' flocks, by customising a breeding index to the production system of the ram buyer. It has been developed by AbacusBio for Sheep Improvement Ltd.

Every farm is unique in that it has its own environmental conditions (climate, rainfall and soil types) and management direction and style (high or low intensity, the relative contributions of meat and wool). Breeding indexes have been tailored to industry averages for production, or to the averages of subsets of the industry. RamFocus goes a step beyond this by surveying the buyer's own production system and customising the ranking of rams to their particular goals and expectations.

In order to come up with a set of custom index rankings, a short survey comprised of 23 questions must be answered. These answers can be provided by interested ram buyers, or alternatively, representative sets of answers can be provided by the breeder. These questions give a broad-brush description of their property, performance, breeding objectives and future expectations for the individual ram buyer. The answers are converted into parameters, which in turn are used to calculate the economic weighting for the traits under selection. This is important as the economic value for a given trait is not necessarily constant for flocks with different average performances.

For example, the value of increasing the number of lambs born per ewe lambing depends on the mean fertility of the flock. When the number of lambs born per ewe lambing is low, the value of producing an extra lamb per ewe is high. But, when lambing percentage is already high, the value of producing the extra lamb is reduced because of the poorer survival of multiple born lambs, especially in triplets. In some circumstances the economic value can become negative. Rams will therefore re-rank in the index because their particular merit will be better suited to some production systems than to others.

RamFocus also offers a means of recording ram sales for the ram breeder. A small database listing all rams in the breeder's ram list can be displayed. Animals can be recorded as being sold or culled, the purchasers name can be recorded, the ram price and any general comments recorded.



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Accelerator sale-ability score

Some high index animals don't produce sale-able rams

- * Use SIL Dual Purpose index values (DPO) combined with sales information to identify proven top sellers
- * Identify rams and ewes that not only rank highly on DPO index, but consistently achieve high sale values for their lambs
- * Identify ewes and rams that rank highly on index, but don't achieve the ram sales their index values merit; remove these animals from the system and increase your

Sale-ability score; information generated by AbacusBio Limited

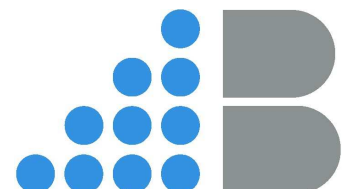
Sire summary: ram lambs sold					
Sire	Lambing year	Weaned ram lambs	average DPO	Rams sold	% sold at top price
128/00	2002	40	>650	15	50%
	2003	60	>650	28	48%
	2004	90	>650	-	-
	Percent sales out of weaned ram lambs			46%	49%
167/00	2002	40	>650	15	25%
	2003	50	>650	20	22%
	2004	60	>650	-	-
	Percent sales out of weaned ram lambs			39%	23%

Maximise selling potential

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R-AMP

Ram Accelerator Marketing Plan

Top genetics are no use unless you can sell them

Abacus Accelerator offers you R-AMP in ram selling by working with you to develop and implement an effective marketing plan to help you sell more rams

- * Develop your yearly goals and targets
- * Determine your target buyers
- * Develop your story-what's the *big* thing? What is the benefit of *your* rams?
- * Create a communication timetable around the breeding season, when and how to advertise, how much effort in advertising and which methods
- * Control and measurement-what has been effective in the past? How can we better measure what works and what doesn't?
- * Pricing-what should you be charging? Are you under or over pricing your rams?

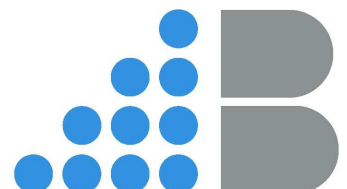


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Part of
Membership

Accelerator News and e-reports

Accelerator Reports

At AbacusBio we are working to continually enhance our service. As part of this, we have developed new improved Accelerator e-reports. These electronic reports are available only to Abacus Accelerator clients. They have built in data filters allowing you to safely and easily extract and sort data into a format useful for you and your clients.

Reset button to go
back to the start

The screenshot shows a Microsoft Excel spreadsheet titled "AcceleratorReport_example.xls" in Compatibility Mode. The spreadsheet displays a table with columns for various data points, including "cfik", "byr", "tag", "tag_number", "DPO", and several columns representing different years (e.g., 9999.111/06, 9999.222/05, etc.). The table is titled "ABACUSBIO LIMITED". A "Reset Form" button is visible in the top left corner of the data area, and a "Sort Ascending" button is also present. The spreadsheet is currently displaying data for the year 2010, with columns for various years from 2002 to 2010. The data includes values for "DPO" and various numerical columns, with some cells highlighted in red.

cfik	byr	tag	tag_number	DPO	9999.111/06	9999.222/05	9999.B1/06	9999.333/06	9999.B2/06	999.B3/06	1111.B4/05	9999.B5/06	9999.444/06	9999.55
2610	2003 520/03	520	1893	0.000	0.000	0.060	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.250
2610	2003 224/03	224	1736	0.040	0.080	0.250	0.030	0.010	0.000	0.020	0.000	0.020	0.060	0.060
2610	2005 775/04	775	1599	0.040	0.080	0.130	0.060	0.010	0.010	0.010	0.000	0.020	0.030	0.030
2610	2004 203/04	203	1511	0.040	0.020	0.010	0.270	0.020	0.050	0.000	0.030	0.000	0.000	0.000
2610	2003 798/03	798	1451	0.010	0.070	0.060	0.010	0.000	0.010	0.000	0.040	0.000	0.060	0.060
2610	2003 225/03	225	1439	0.040	0.080	0.120	0.030	0.010	0.000	0.020	0.000	0.020	0.000	0.000
2610	2002 512/02	512	1419	0.010	0.020	0.000	0.140	0.000	0.070	0.000	0.010	0.000	0.000	0.000
2610	2003 232/03	232	1401	0.010	0.060	0.060	0.010	0.000	0.010	0.000	0.010	0.000	0.060	0.060
2610	2003 947/03	947	1355	0.010	0.070	0.060	0.010	0.000	0.010	0.000	0.130	0.060	0.060	0.060
2610	2001 856/01	856	1224	0.020	0.000	0.000	0.000	0.010	0.000	0.010	0.000	0.020	0.000	0.000
2610	2003 841/03	841	1218	0.270	0.020	0.020	0.040	0.020	0.020	0.000	0.030	0.000	0.000	0.000
2610	2002 840/02	840	1314	0.030	0.020	0.000	0.060	0.010	0.260	0.000	0.040	0.000	0.000	0.000
2610	2003 781/03	781	1295	0.000	0.250	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
2610	2003 829/03	829	1294	0.000	0.060	0.060	0.000	0.000	0.000	0.000	0.010	0.000	0.060	0.060
2610	2003 950/03	950	1237	0.010	0.070	0.060	0.010	0.000	0.010	0.000	0.040	0.000	0.060	0.060
2610	2004 351/04	351	1227	0.080	0.010	0.010	0.030	0.250	0.010	0.000	0.070	0.000	0.000	0.000
2610	2005 927/05	927	1227	0.020	0.000	0.000	0.010	0.010	0.020	0.000	0.020	0.000	0.000	0.000
2610	2003 153/03	153	1220	0.030	0.080	0.080	0.030	0.010	0.010	0.000	0.020	0.000	0.060	0.060
2610	2004 384/04	384	1219	0.040	0.020	0.010	0.100	0.020	0.050	0.000	0.040	0.000	0.000	0.000
2610	2006 921/06	921	1164	0.000	0.030	0.160	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250
2610	2001 569/01	569	1145	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000
2610	2002 744/02	744	1144	0.010	0.020	0.000	0.050	0.000	0.070	0.000	0.020	0.000	0.000	0.000
2610	2005 808/05	808	1142	0.010	0.000	0.000	0.010	0.000	0.010	0.000	0.010	0.000	0.000	0.000
2610	2002 283/02	283	1141	0.000	0.060	0.000	0.000	0.070	0.020	0.000	0.000	0.000	0.000	0.000
2610	2003 712/03	712	1133	0.080	0.000	0.000	0.010	0.010	0.010	0.020	0.000	0.050	0.000	0.000

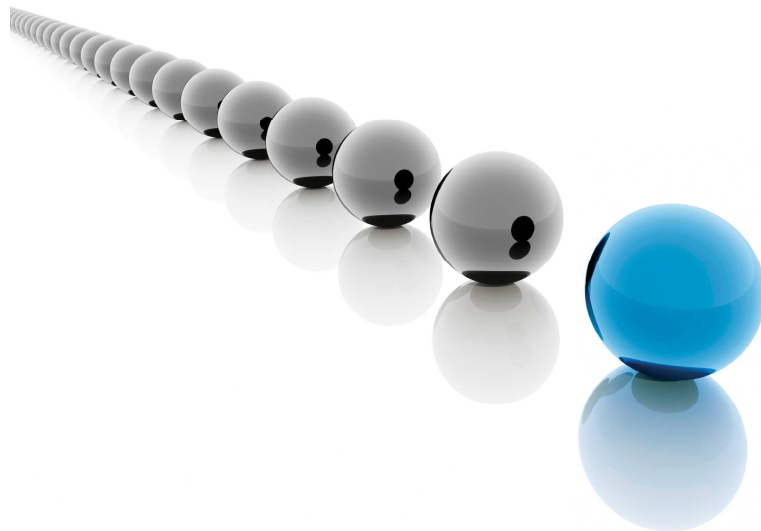
Built in data filters
for safe and easy
sorting

Helping breeders accelerate genetic progress

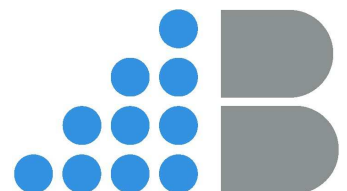
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Accelerating Genetic Progress



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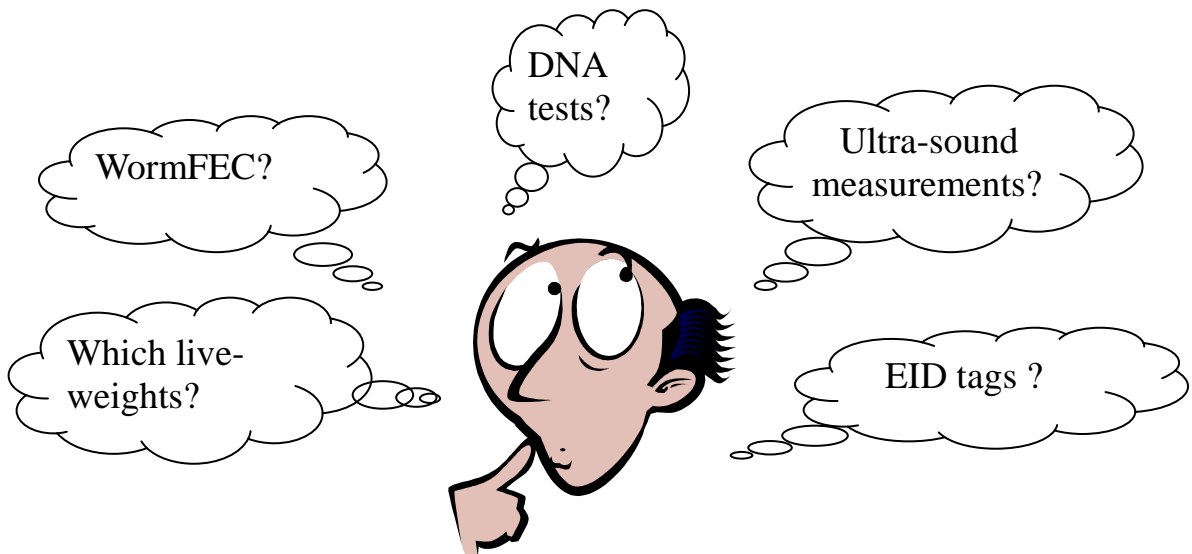
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Breeding Scheme Design

How do I make the most of my genetics?

AbacusBio consultants specialise in providing advice on breeding scheme design to ensure you accelerate genetic progress in the direction you want to take. Using both standard and customised indexes, we can independently assess the impact of technologies such as DNA parentage and gene tests, ultrasound measurements and FEC recording in your flock. Using economic models, we can compare different breeding schemes and make recommendations as to the breeding program best suited to your requirements.

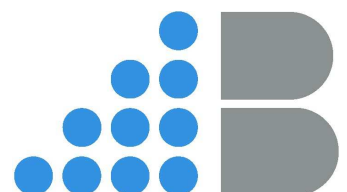


Helping breeders make the right decisions

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Advanced Diagnostics

Is your stud maximising its genetic potential?

AbacusBio has developed an Advanced Diagnostics software programme to identify strengths and deficiencies in breeding practices.

The programme analyses generation interval, selection differentials, traits recorded, mating ratios, merit of retained sires, frequency of founder animals (i.e. with unknown pedigree), numbers of animals in key fixed effect categories, as well as the incidence and historic patterns of inbreeding. All results are reported over a range of years.

An example is shown below of our generation interval advanced diagnostic table.

We provide expert interpretation of the results with a view to getting your stud to its maximum rate of genetic progress.

Generation Interval table: Identify trends in mating age structures

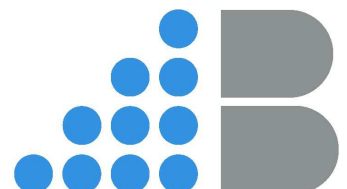
Birth Year	No of Births	Average sire age	No born to 1 year old rams	No born to 2 year old rams	Average dam age	No born to hoggets
2001	2740	2.7	529	828	3.6	0
2002	2286	1.9	1276	324	3.8	2
2003	2646	2.4	217	1689	3.8	123
2004	2819	2.5	220	1373	3.4	411
2005	2963	2.9	324	1197	3.4	197
2006	3146	3.1	444	925	3.4	142
2007	3576	2.4	1324	1271	3.6	116

Diagnose what is holding back your genetic progress

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Customised Breeding Objectives

Are your clients different to the national average sheep farm ?

Do you want to breed for a future that others cannot see?

Custom breeding objectives go one step further than SIL Ram Focus.

AbacusBio consultants work directly with you and your clients to develop an index specifically for your breeding operation. Contact AbacusBio to discuss customising your breeding objectives and receive:

- * Relevant survey information from your clients; essential when targeting high value niche markets
- * Customised index designed specifically for your breeding operation, which can be loaded onto SIL and included in your flock reports
- * Breeding advice from internationally recognised consultants

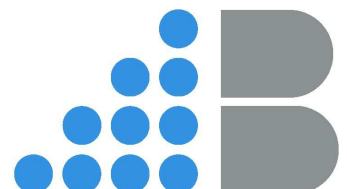


Providing professional breeding solutions

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Key Ancestor Summary

Imagine having a sheep as famous as Shrek !

Key ancestor summaries are used to identify which animals have contributed the most to the genetics of your flock. Ideal for marketing and promotion of your genetics, use key ancestor searches to satisfy curiosity and tell a story about your flock.

- * Ancestor search identified relatives for up to 7 generations
- * Results presented in table or pictorial format
- * Key sires and dams identified

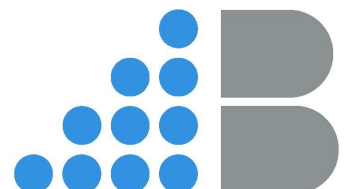
Key Ancestor	2nd generation	3rd generation	4th generation	5th generation	6th generation	7th generation
589/84						
	223/89	18/93	18/95	2073/97	132/02	
				2218/97	3123/99	2012/01
						1200/03
						3692/03
				1236/98	2542/99	3454/02
				2099/98	1342/00	
					3688/02	
				7621/98	3562/02	
				7660/98	1301/01	
			2876/95	1211/98	1489/00	862/03

Tell a story about the animals in your flock

Abacus Accelerator

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PO Box 5585
Dunedin, New Zealand

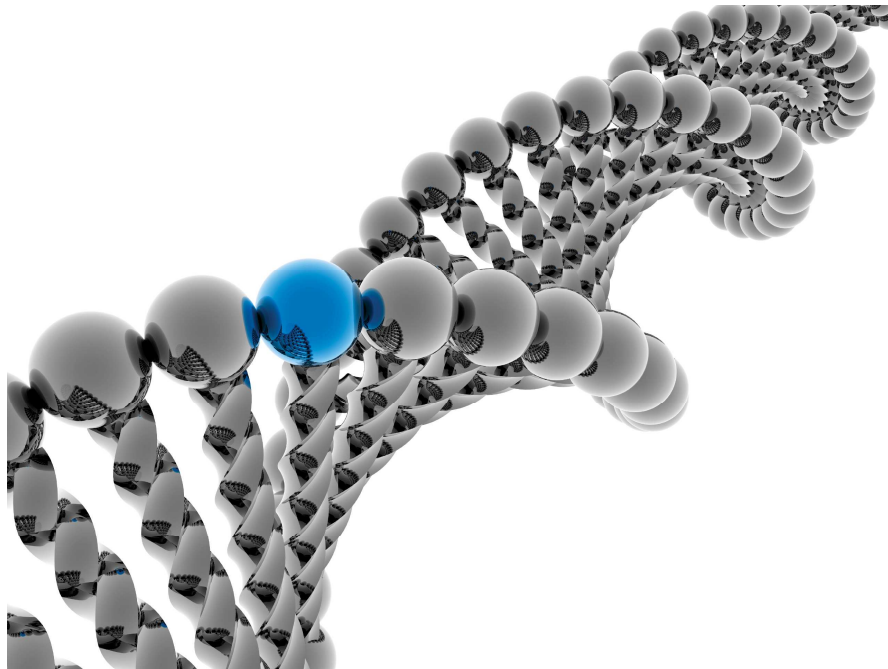
Phone: 03 4776375
Fax: 03 4776376
E-mail: accelerator@abacusbio.co.nz
www.abacusbio.co.nz



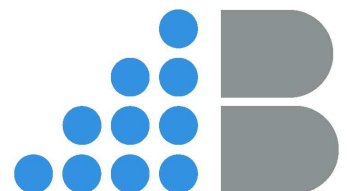
Abacus Accelerator™

profits, progress, diversity

Enhancing
diversity



ABACUSBIO LIMITED



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Part of
Membership

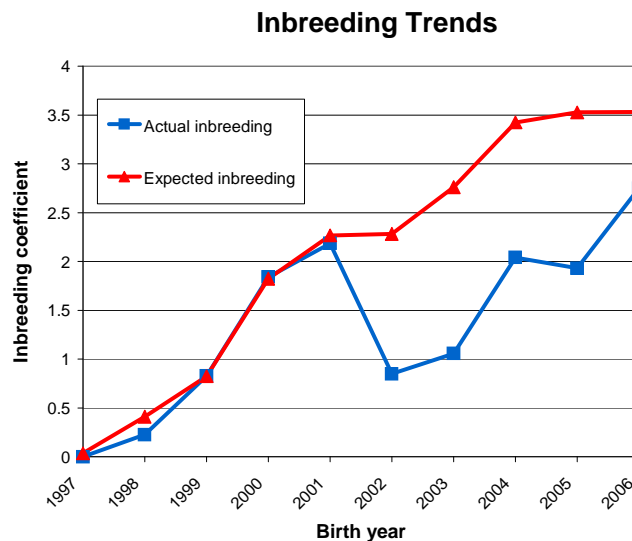
Inbreeding Diagnostics

What is happening in your flock right now?

Inbreeding is caused by the mating of related animals.

- * The more closely related the animals are, the higher the levels of inbreeding.
- * **Increased** levels of inbreeding can lead to **decreased** performance. An increase in inbreeding coefficient by 10 percentage units can result in a 2% reduction in performance for each trait.

Inbreeding diagnostics gives you an immediate snapshot of levels of inbreeding in your flock. In the graph below, an AbacusBio client started using ANI-MATE ADVANCE® in 2001. Inbreeding diagnostics allowed them to track and measure their progress in minimising inbreeding.



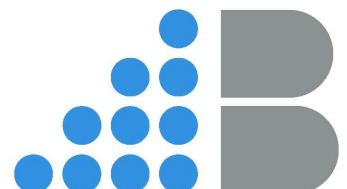
All Accelerator clients receive inbreeding diagnostics and ANI-MATE® services. Use inbreeding diagnostics to monitor the progress in your flock, and identify inbreeding issues before they cause you problems.

Maintaining genetic diversity over time

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ANI-MATE™

Save time at mating, MINIMISE inbreeding, MAXIMISE genetic gain

As a breeder you have to grapple with the trade-off between rates of genetic gain and increased levels of relatedness between animals within the stud. It is not uncommon for average inbreeding rates to rise by 0.5% per year in flocks where there is little introduction of new genetic material. At this rate, after 10 years, inbreeding might lead to a 5% reduction in ewe productivity.

We provide you with ready to draft mating lists which save time and increase flexibility.

Relatedness tables

- * **Increase** genetic diversity and produce more elite sale rams
- * **Reduce** risks of inbreeding

Ewe identifiers			Ram tags		
flock	tag	byr	20/04	36/04	128/04
999	800/99	1999	0.04	0.02	0
999	901/99	1999	0.06	0.05	0
999	908/99	1999	0.03	0.02	0
999	982/99	1999	0.26	0.04	0.01
999	986/99	1999	0.01	0.01	0.01

Ready to draft mating lists

- * **Decrease** matings between relatives
- * **Decrease** time setting up mating groups
- * **Increase** management group flexibility both before and after mating

SIL ANI-MATE Mating List			
Ewe tag	Ram tag	Ewe merit	Ewes sire
589/97	592/02	-20	
955/97	781/02	15	
957/97	781/02	-34	
967/97	781/02	31	
969/97	781/02	25	
2037/98	806/02	123	2166/93
2051/98	806/02	125	291/96
2070/98	806/02	74	291/96

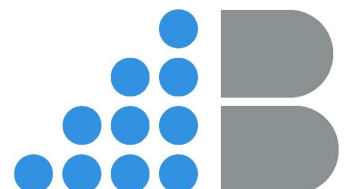
Related
Closely
Related

Use ANI-MATE™ to fine tune your matings

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What does ANI-MATE™ do?

ANI-MATE™ provides you with a relatedness table or alternatively, ready-to-draft mating lists for your selected rams and ewes.

Relatedness tables

Relatedness tables list candidate ewes (rows) against candidate rams (columns) with the inbreeding indicated for lambs born for every potential ram-ewe combination. This can be used on its own, or alternatively, to fine-tune allocations provided as part of an ANI-MATE™ mating list.

Mating lists

Mating lists are prepared keeping inbreeding to a predefined minimum. ANI-MATE™ automatically avoids sire-daughter and parent-progeny matings and controls all mating with direct relatives. Rams are assigned to ewes according to your preferred selection strategy:

- * Best-to-best (high-to-high) or high-to-low
- * Your choice of standard SIL indexes.
- * Focusing solely on minimising inbreeding in progeny

How does it work in practice?

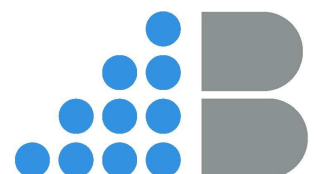
1. You tell SIL which rams you want to use and whether some rams are going to only some ewe age groups (eg. only to 2-tooths)
2. ANI-MATE™ assigns ewes to rams on the basis of minimal inbreeding and your selection strategy
3. SIL produces a Ram Usage Summary, a Backup Ram List, a Simple Ewe Mating List and a Comprehensive Ewe Mating List.

You fine-tune individual matings as required.

ANI-MATE ADVANCE™

Some breeders have very specific requirements when planning matings. For these breeders a more customised service, ANI-MATE ADVANCE™ is also available .

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ANI-MATE™ ADVANCE

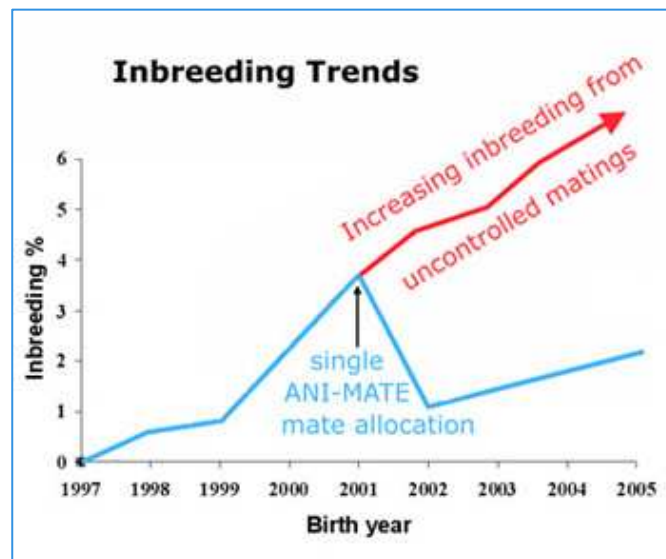
Save time at mating, MINIMISE inbreeding, MAXIMISE genetic gain

ANI-MATE™ ADVANCE adds further value to ANI-MATE™ .

Working directly with breeders, AbacusBio uses ANI-MATE™ ADVANCE to provide individually tailored solutions, and produces a list of specific recommend matings to ensure the best possible outcome.

Increase probability of producing elite individuals

Decrease problems associated with inbreeding, now and in the future

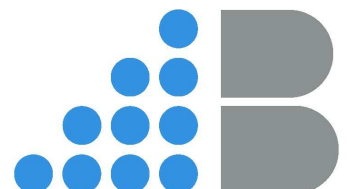


Adding value to pedigree and genetic information.

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How does ANI-MATE™ ADVANCE work?

ANI-MATE™ ADVANCE is a system to minimise the build-up of short- and long-run inbreeding in genetic improvement programmes, and so add further value to the existing pedigree and genetic evaluation systems.

Individually tailored solutions can be adapted to a wide range of circumstances, eg potential solutions for large flocks, multiple sire joining and complex preferential mating systems.

Specific individual and group mating plans can be developed by analysing breeding value, index and pedigree data extracted from databases such as the [Sheep Improvement Ltd \(SIL\)](#) database. These plans are designed to increase the likelihood of producing greater numbers of elite animals while reducing the impact of inbreeding in both the short and long term.

ANI-MATE™ ADVANCE analyses the flock records to determine how related individual rams are to the current ewe flock and potential hogget replacements, with the goal being to maximise genetic progress without increasing overall relatedness beyond given limits.

ANI-MATE™ ADVANCE utilises a number of techniques including:

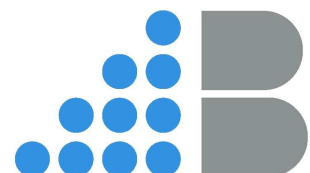
- assortative (or "best-to-best") mating
- tactical and strategic inbreeding control
- relatedness profiling.

Each technique may be used individually, or in combination, depending on the needs of the individual breeder .

Along with best-to-best and random mating, ANI-MATE™ ADVANCE uses a number of inbreeding control strategies that can be applied to carefully manage the overall relatedness among selected parents. The outcome is maintenance of valuable genetic diversity within a flock.

The systems are readily transferable to other livestock breeding businesses.

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Accelerator relationship tables

Available only to Abacus Accelerator™ clients

The new expanded Accelerator relationship table combines ANI-MATE™ data with SIL breeding values and index results. This provides a comprehensive summary for each ewe, allowing breeders to easily identify matings to be avoided, while at the same time matching ewes to rams.

New expanded relationship table format

Ewe tags	Ram tags			SIL results				
	20/04	36/04	128/04	DPO	Rank	WWTBV	LW8BV	NLBBV
800/99	0.04	0.02	0	843	202	2	3.68	0.138
901/99	0.06	0.05	0	1094	55	2.49	3.45	0.136
908/99	0.03	0.02	0	375	495	1.37	1.53	-0.041
982/99	0.26	0.04	0.01	810	226	1.98	3.61	0.049
986/99	0.01	0.01	0.01	1080	64	2.41	3.33	0.135

Related

901/99 highly ranked by DPO

Closely
Related

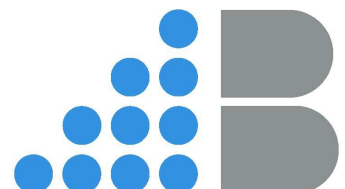
Manage in-breeding by mating
ewe 901/99 to ram 128/04

Providing more information for Accelerator clients

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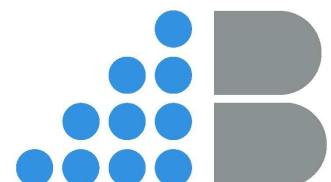
Accelerator Price Schedule

ACCELERATOR SERVICE	ACCELERATOR PRICE (per year)
RamFocus	Contact AbacusBio ¹
Sale-ability score	\$550 per flock
R-AMP Accelerator marketing plans	\$1,600
Breeding scheme design	Contact AbacusBio ¹
Advanced diagnostics	Contact AbacusBio ¹
Customised breeding objectives	Contact AbacusBio ¹
Inbreeding diagnostics	Part of membership
Key ancestor summaries	Contact AbacusBio ¹
ANI-MATE™ Relatedness table	\$750 per flock + \$200 for each additional analyses due to incomplete or incorrect data
ANI-MATE™ Relatedness table and ready to draft mate list	\$750/flock for flocks with less than 750 breeding ewes \$1000/flock for flocks with 750 or more breeding ewes Additional \$200 for each additional analyses due to incomplete or incorrect data
ANI-MATE™ ADVANCE	Contact AbacusBio ¹

¹Accelerator clients receive discounted prices on all AbacusBio services

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Yes, I would like more details

Please fill in this form and we will send you out an *Abacus Accelerator™* information pack, or contact Anna Campbell, Jude Sise or Peter Amer at AbacusBio (03) 4776375, evenings (03) 4890911 (Anna) or email accelerator@abacusbio.co.nz, fax (03) 4776376.

Name: _____

Stud name: _____

SIL number: _____

SIL Bureau: _____

Number of breeding ewes: _____

Address: _____

Email address: _____

Home number: _____

Mobile number: _____

I agree that AbacusBio can access data from SIL for my flocks, and that the data can be used for the provision of *Abacus Accelerator™* services.

Signature: _____

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