

meatup FORUM

For the latest in red meat R&D

How to profit from pregnancy scanning

Dr Sue Hatcher

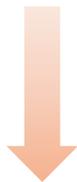
Sheep Reproduction Strategic Partnership (SRSP)

What is the end game?

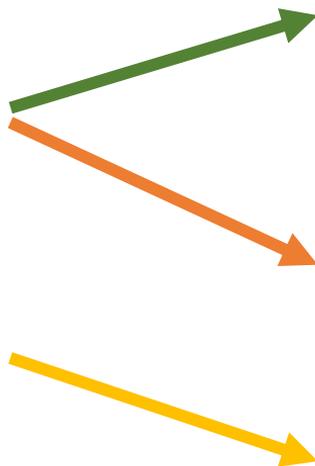
Net reproduction
rate (NRR)

=

Number of lambs weaned
Number of ewes joined



**Management
&
Genetics**

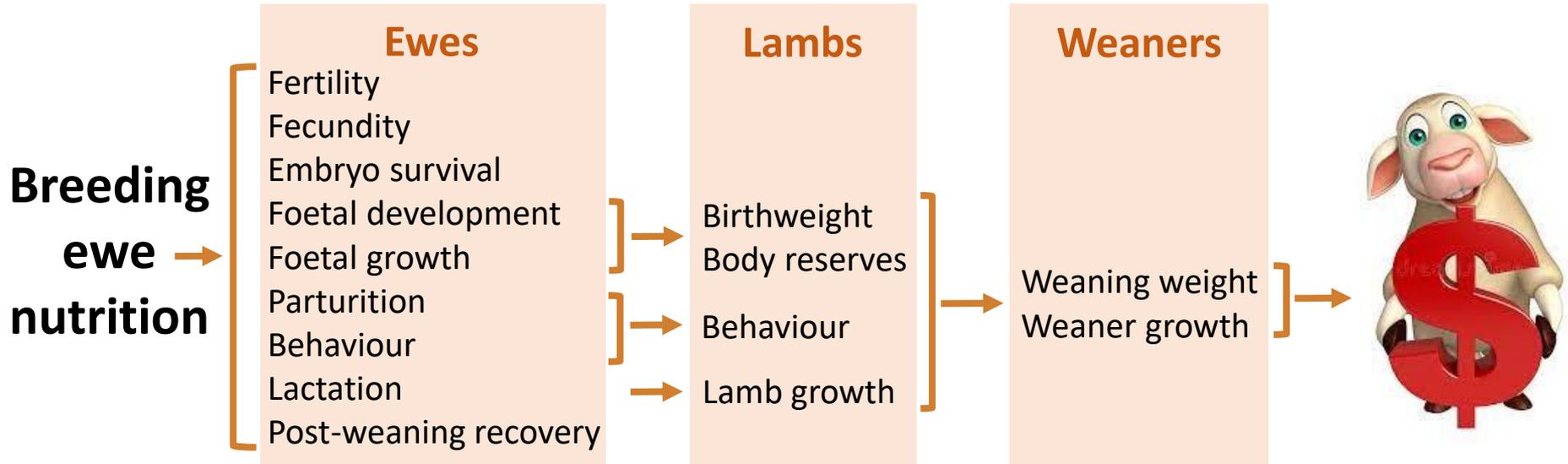


**Breeding Ewe
Management**
nutrition, joining, lambing &
weaning

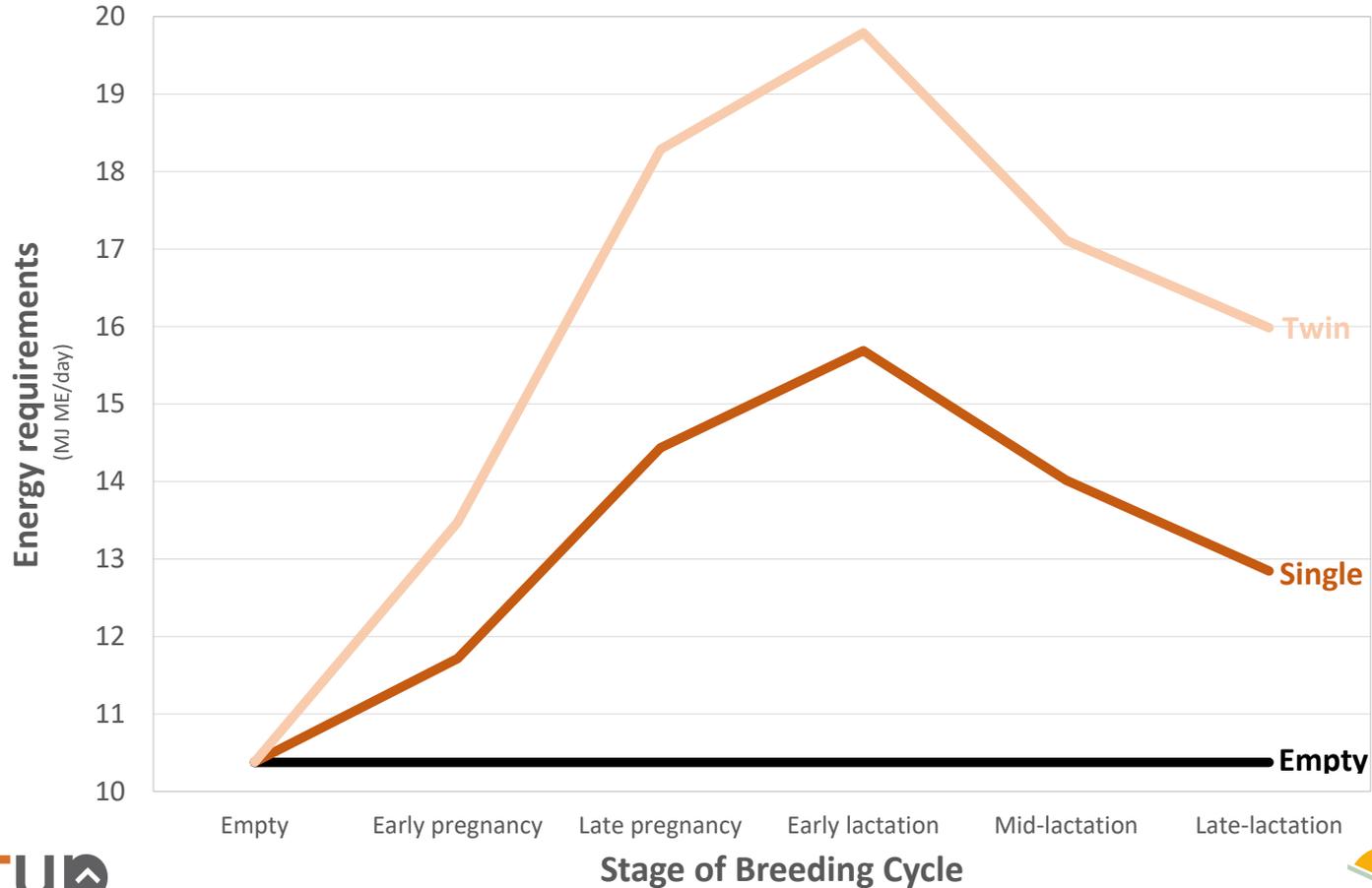
**Breeding Ewe
Selection**
passengers & performers

ASBVs
rams & ewes

Ewe nutrition is the key driver



Not all ewes are the same



Pregnancy scanning is a key tool

- Benchmark current flock performance

Marking & weaning percentages

- **Manage your ewes**

Ewe nutrition, lambing management

- **Select your ewes**

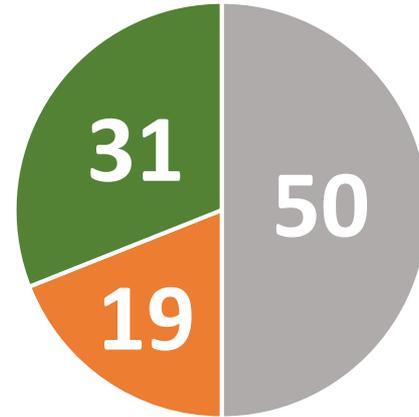
High performing replacements

- **Breed your ewes**

Correct for birth type

Proportion Scanning

Survey of 598 producers



■ Do not scan ■ Pregnancy Status ■ Litter Size

Source: Beattie & Howard (2018)

Quantifying the economic benefit of scanning

Production system

- > 600 mm grazing enterprise
9-month growing season
- 500 - 600 mm mixed farming
6-month growing season
- < 400 mm mixed farming
4-month growing season

Genotype

- Merino
- Merino x Terminal
- Maternal

Lambing time

- Autumn
- Winter
- Spring

Sensitivity to NRR, prices & environment (chill)

Quantifying the economic benefit of scanning

Production system

- > 600 mm grazing enterprise
9-month growing season
- **500 - 600 mm mixed farming**
6-month growing season
- < 400 mm mixed farming
4-month growing season

Genotype

- **Merino**
- Merino x Terminal
- **Maternal**

Lambing time

- **Autumn**
- Winter
- Spring

Sensitivity to NRR, prices & environment (chill)

Cost of scanning

			MULTIPLES
SCANNING CONTRACTOR			
Contract cost	\$/ewe		\$0.75
Throughput	ewes/day		2,000
Travel	\$/ewe		\$0.02
FARM PROVIDED LABOUR			
Yard work	labour units		2
Cost	\$/ewe		\$0.26
Mustering	\$/ewe		\$0.06
OTHER COSTS			
Repairs & maintenance*	\$/ewe		\$0.08
TOTAL COST	\$/ewe		\$1.17

Merino enterprise - increase in farm profit

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	7.80					
Winter	2.80					
Spring	5.50					
AVERAGE	5.37					

You need to use the scanning data

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	7.80	Once-empty & performer				
Winter	2.80	Twice-empty				
Spring	5.50	Twice-empty				
AVERAGE	5.37					

You need to use the scanning data

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	7.80	Once-empty & performer	↑	↑	↑	↑
Winter	2.80	Twice-empty	Removing empty ewes	Feed ewes according to pregnancy status	Multiples to best paddocks at 50% singles mob size	Lifetime CFW & FD
Spring	5.50	Twice-empty				
AVERAGE	5.37					

Autumn lambing Merino flocks

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	7.80	Once-empty & performer	49	15	21	15
Winter	2.80	Twice-empty	-19	24	34	23
Spring	5.50	Twice-empty	17	51	23	9
AVERAGE	5.37					

Merino enterprise - increase in farm profit

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	7.80	Once-empty & performer	49	15	21	15
Winter	2.80	Twice-empty	-19	24	34	23
Spring	5.50	Twice-empty	17	51	23	9
AVERAGE	5.37					

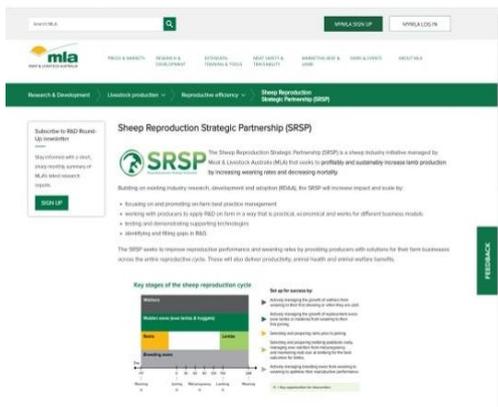
Maternal enterprise – increase in farm profit

TIME OF LAMBING	INCREASE IN FARM PROFIT <i>(\$/ewe)</i>	EWE SELECTION DECISIONS	CONTRIBUTION OF THE COMPONENT# <i>(%)</i>			
			Pregnancy status	Ewe nutrition	Paddock allocation	Progeny performance
Autumn	5.80	Once-empty & performer	35	14	42	9
Winter	4.00	Twice-empty	-25	36	9	29
Spring	4.20	Twice-empty	3	35	28	34
AVERAGE	4.67					

Sheep Reproduction Strategic Partnership (SRSP)

- Profitably and sustainably increase lamb production by increasing weaning rates and decreasing mortality
- Drive collaboration to develop larger, long-term programs of RD&A to deliver greater benefits and impact for the sheep industry

mla.com.au/srsp



The screenshot shows the SRSP website homepage. At the top, there is a search bar and navigation links for 'REPRODUCTION' and 'LAMBING/LOIN'. Below this is a navigation menu with categories like 'Research & Development', 'Livestock production', 'Reproductive efficiency', and 'Sheep Reproduction Strategic Partnership (SRSP)'. The main content area features a 'Subscribe to SRSP Round-Up newsletter' button and a 'SRSP' logo. A section titled 'Sheep Reproduction Strategic Partnership (SRSP)' describes the partnership's goal to increase lamb production by 20% through weaning rates and decreasing mortality. It lists key objectives such as building on existing research, creating a national research program, and identifying and filling gaps in R&D. A 'Key stages of the sheep reproduction cycle' diagram is also visible, showing stages like 'Pregnancy', 'Lambing', and 'Weaning'.



This is a screenshot of a newsletter article titled 'Sheep reproduction RD&A alert' dated July 2022. The article is an initiative of the SRSP. It states that M&A is calling for applications for M&A projects (matched funding) related to evaluating reproductive performance of shedding sheep enterprises. The article lists key reproductive performance metrics and encourages sheep enterprises to consider different types of shedding sheep. It identifies Dr Sue Heltzer as the program coordinator with contact information: M: 0407 006 454 and E: sue@meatandwool.com.au. The article also mentions a 'Feature project update' and a goal to 'Manage Merino weaners to survive and thrive' by identifying opportunities for post-weaning nutrition and management to deliver cost-effective improvements in weaner survival and subsequent reproductive performance.



Welcome
How to profit from
pregnancy scanning



John Young
Farming Systems Analysis Service



Josh Cousins
Cousins Merino Services

Working across the whole reproduction cycle

Weaning to joining

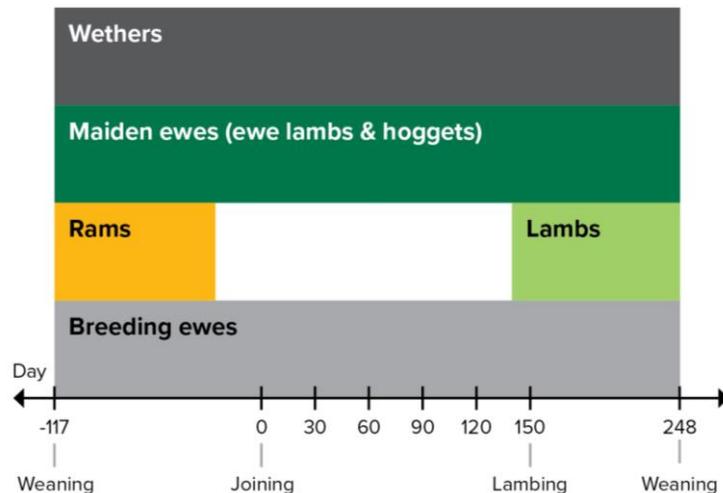
Fit to join
More lambs from ewe lambs
Joining ewe lambs DST
Oestrogenic clovers
Merino weaners

Mid-pregnancy

Pregnancy scanning
Foetal loss
Twin lamb survival

Lambing to weaning

Fit to lamb
Mob size
Supplementary feeding
Triplet ewes



Whole cycle

Shade & shelter

Flock rebuild strategies, EID, Containment feeding, Sheep remote monitoring

Towards 90 – Accelerating Sheep Repro Best Practice

Cumulative sustainable increases in farm profit

\$5.37/ewe

Increasing lambing percentages through better use of **pregnancy scanning technology**



Improved ewe management & ewe selection decisions

\$4.12/ewe

Maximising the value of existing technology for sheep producers



Improved breeding & ewe selection decisions

\$5.57/ewe

Fit to join Ewe Assessment Tools



Improved ewe selection decisions

Take home messages

- Pregnancy scanning for multiples is profitable in all agricultural regions and flock types
- The average increase in profit for:
 - Merino flocks was \$5.37/ewe scanned → 460% ROI
 - Maternal flocks was \$4.67/ewe scanned → 400% ROI

You must act on the scanning information to capture the extra profit

Tools and resources

- mla.com.au/srsp
- Towards90.com.au
- genetics.mla.com.au