

# AgLetter

29th September 2017

# **Counting the Cost**

As the first docking tallies start coming in from hill country properties up the east coast of both islands, the extent of lamb losses from the week-long storm in early September are becoming a reality. Tallies in some twin paddocks are as low as 130-140% with up to 20% wet-drys.

**All-Weather Airstrips** 

Apart from on some of the higher coastal country, the <u>Gisborne</u> region largely escaped lamb and calf losses from this event. Feed covers under cattle are ahead of normal and there's more clover around due to the mild winter.

In <u>Northland</u> the feed is coming away, but regular rain has kept soil conditions sticky, and lambs and calves need to see more sun to get up and going. Consultants there report a new interest from local dairy farmers looking to diversify their businesses by reducing milking cows and increase beef finishing. Payout, labour issues and relative profitability seem to be driving this.

The docking tallies in the <u>King Country</u> have fallen off in the south of the region, more from bearings and cast ewes than storm-related lamb deaths. Stock agents are reporting some nervousness around cattle prices that are expected to fall away toward the end of November once the stock start flowing. Dairy milk production is running 10% ahead.

Although the wet weather at the beginning of the month boosted the water table in <u>Hawkes Bay</u>, the numerous cold snaps this month have kept the lid on pasture growth rates. Cattle are still being held up but sheep feed is starting to lift.

The <u>Manawatu</u> is "starting to pump". Being a bit more sheltered from the southerlies, drier soil conditions have allowed cropping programmes to get going 2-3 weeks earlier than normal. All eyes are on the malting and feed barley contract prices to see whether there's any upside in demand from the dairy sector vs acreage of crop planted.

It's a case of the "haves" and the "have nots" when it comes to lamb tallies in the <u>Tararua/Wairarapa</u> regions. Some districts on higher country inland from the coast have clearly been hammered, but those further west and on later country have largely dodged the bullet. Farmers are looking for a decent sort of October to get the lambs growing. Recent Octobers have been struggle months.

#### **Sheep Selling Well**

The main focus in the sheep pens has been the ewes with lambs at foot. Around 400 ELAFs were sold at Stortford and 600 at Feilding. Average lines sold for \$114-\$116 and \$110-\$115 at the two sales respectively. Greater numbers are being traded in the paddock for around \$95-\$110, but these are generally more mixed in type and condition. The last of the 2017 store lambs are moving for \$4.00-\$4.15/kg LW

Traded volumes of yearling and 2yo bulls are lifting. Medium weight yearling bulls (230-260 kg) are making up to \$3.60 in sale yards and \$3.30-\$3.40 on-farm. Heavier yearlings are closer to \$3.00/kg. Two year-old bulls 430-460 kg are making around \$3.25 at the sale and \$3.10-\$3.15 in the paddock.

Traditional yearling steers have been making \$3.90-\$4.00 at the sale with dairy-cross animals closer to \$3.30-\$3.50.

#### **Beef Operating Prices Softening**

As the volumes lift, prime and bull schedules are easing back to reflect the weaker underlying market conditions. Prime steer back to around \$5.80 and bull to \$5.25. The US imported beef market appears to be oversupplied with a surge of domestic product (not being exported). The lamb operating price has also drifted back to around \$8.40/kg but on low volumes. A higher proportion of heavy weight lambs coming forward are failing to meet the UK Christmas market spec.

AT A GLANCE (NI)	-2 weeks	-1 week	This Week	Trend	Change
Store Lambs 2017	\$4.00	\$3.80	\$3.80	=	
Export Lamb	\$8.50-\$8.60	\$8.45	\$8.40	û	-5c
Store Yearling Steer	\$3.90	\$3.90	\$3.90	=	
P2 Steer (295 kg)	\$6.00	\$5.90	\$5.80	Û	-10c
Bull (295 kg)	\$5.50	\$5.40	\$5.25	#	-15c
Local Trade Beef (220 kg)	\$6.00-\$6.10	\$5.90-\$6.00	\$5.90	1	-10c
Strong Wool Indicator	332	328	328	=	
90-day Bill Rate	\$1.88%	1.91%	1.91%	=	
US Bull Price (c/lb US)	198	193	192	#	-1c
\$NZ/£UK	0.5025	0.5046	0.5054	=	
NZ/\$US	0.6590	0.6688	0.6606	#	-1%

# All-Weather Airstrips

#### **Summary**

All-weather airstrips allow fertiliser to be applied on time in late autumn/early spring, reducing the cost of application and making more efficient use of the limited number of aerial fertiliser contractors. Strip upgrades can be relatively cheap and effective.

#### **The Problem**

- An increasing amount of product is being applied in the late autumn and early spring.
- The timing of application of this product has strategic importance to both breeding and finishing systems.
- Most farming districts are under-supplied by aerial fertiliser contractors, and they come under a lot of pressure
  in these times of peak demand.
- The weather has become more volatile, and extended periods of settled weather are less common.
- More lime is being applied, putting greater tonnage through airstrips, tracks and bins.
- The pressure brought to bear on aerial contractors through congestion impacts on their personal safety.
- Farmers using their airstrips as feed pads for wintering cattle doesn't help.

#### **Solutions**

- More aerial contractors would be nice but its not going to happen in a hurry. It costs \$100,000 to train a new pilot and \$2M capital for a fully equipped machine. Also, the industry is facing severe competition from international airlines drawing away potential pilots.
- New technology using hyperspectral photography and differential spreading application (AgLetter 28-5-16) may slightly reduce the tonnage of product needed to be applied.
- All-weather airstrips can offer more flying days at times of peak demand during difficult weather.

#### **All-Weather Strip Options**

- In AgLetter 6-12-04, we covered off the options of gravel vs tar seal vs concrete surfaces. The construction costs increase as you go through these options, but concrete surfaces are still more appropriate for the highest-tonnage operations.
- It's important to remember that the airstrip track and turn-around/apron area are just as important components of the infrastructure if true efficiencies are to be achieved.
- In the Wairarapa, several airstrips have been upgraded recently using crushed rotten rock or limestone material. These appear to be very cost-effective and this is what we focus on here.

# **Crushed Rock - Limestone Upgrade**

- These earth strips have typically been upgraded by removing the topsoil and replacing with either rotten rock or limestone, depending on the availability of these alternatives. (The carting distance for the material is a significant price component).
- The working strip is typically around 8 m wide and 300-400 mm long (depending on slope and wind profile). Approximately 100 mm of topsoil is removed and replaced with approx. 150 mm of the hard material, which is then compacted and crowned.
- Additional earthwork and filling may be required to remove wet spots in the strip itself, and to channel run-off away from the new surface.
- The truck turn-around and loading apron may also need an upgrade.
- This is also a good time to look at the capacity of the bins and operation of the bin lid. (Because it is usually the truck or loader driver that has to winch the lid off, pilots say that the best way to get the lid winch repaired is to get the farmer/owner to move the lid for the first load!)



This is also a good time to look at the airstrip track. Is it capable of carrying a 28-30 tonne truck and trailer load to the bin? These loads can add considerably to cartage cost savings compared to carting 13-15 T loads. It may just be a matter of knocking a few corners off and/or improving gradient, as well as re-surfacing.

#### Costs

- Assuming the track, bin and apron area are all up to scratch, the strip upgrade itself may cost something like \$20,000-\$25,000. If the rest of the infrastructure needs to be brought up to speed, the outlay might be closer to \$50,000, depending on the length and state of the airstrip track.
- Back in 2004, we priced a <u>new</u> gravel surface strip and infrastructure at around \$110,000, a tar-seal option at around \$170,000 and concrete at \$220,000. These prices have probably increased by at least 15% since then.

# **Pay-Back**

How do you assess the pay-back on this investment?

- i. More surety around timing of application during wet seasons.
- ii. Priority service from topdressing contractors because of accessibility and quality of infrastructure.
- iii. Quicker response to applied product (nitrogen).
- iv. Less stress on land-owner and aerial contractors.
- v. Cheaper cartage costs.
- vi. Cheaper application costs (turn-around time and not having to use chopper).

A typical dry weather load for a top dressing plane is around 1.9 tonne.

Charge-out rate for the plane is around \$2400/hr. Typical turn-around is 15 runs per hour. 28.5 tonnes/hr applied.

So dry-track application cost for plane (excluding loader etc) is \$84/ per tonne.

On a wet/soft strip, the additional rolling resistance means that 300-400 less product can be carried per load (to achieve take-off). So application rate is 22-24 tonne/hr.

So under wet conditions, the application cost for the plane can be \$100-\$109/tonne.

On a 1000 ha job applying 250 kg/ha, that's a price difference of \$4000 - \$6250 for the job.

#### **Annual Costs of Airstrip Operation**

These will vary depending on the length and standard of the airstrip track and bin, and on the tonnage that is flown off the strip annually.

Assumptions		Over 1500 tonne
Basic maintenance & airstrip management		\$4.00/tonne
Depreciation on infrastructure \$100,000 (av 20 yrs or 5%).	\$5000	\$3.33/tonne
Interest on \$100,000 investment @ 5%	\$5000	\$3.33/tonne
Total annual costs at 1500 tonne p.a.		\$10.66/tonne p.a.

# **Variables**

Capital Cost Strip/Bin/Track								
_	(Including original works on strips that are upgraded)							
tonnes/yr	\$40,000	\$60,000	\$80,000	\$100,000	\$120,000	\$140,000	\$160,000	
250	\$20.0	\$28.0	\$36.0	\$44.0	\$52.0	\$60.0	\$68.0	
500	\$12.0	\$16.0	\$20.0	\$24.0	\$28.0	\$32.0	\$36.0	
1000	\$8.0	\$10.0	\$12.0	\$14.0	\$16.0	\$18.0	\$20.0	
1500	\$6.7	\$8.0	\$9.3	\$10.7	\$12.0	\$13.3	\$14.7	
2000	\$6.0	\$7.0	\$8.0	\$9.0	\$10.0	\$11.0	\$12.0	
2500	\$5.6	\$6.4	\$7.2	\$8.0	\$8.8	\$9.6	\$10.4	
3000	\$5.3	\$6.0	\$6.7	\$7.3	\$8.0	\$8.7	\$9.3	
3500	\$5.1	\$5.7	\$6.3	\$6.9	\$7.4	\$8.0	\$8.6	
4000	\$5.0	\$5.5	\$6.0	\$6.5	\$7.0	\$7.5	\$8.0	
4500	\$4.9	\$5.3	\$5.8	\$6.2	\$6.7	\$7.1	\$7.6	
5000	\$4.8	\$5.2	\$5.6	\$6.0	\$6.4	\$6.8	\$7.2	

Table shows how the annual costs might vary depending on the capital value of the total infrastructure and the tonnage of fertiliser/lime put across the strip.

There are clearly economies of scale at the higher tonnages, lending weight to opportunity for multi-use of the strip.

#### **Ownership and Use**



- Most airstrip owners tend to under-estimate the cost of owning and maintaining an airstrip infrastructure. Consequently, they often don't charge enough when sharing the use of the strip, and sometimes don't spend enough on regular maintenance.
- The figures above suggest that for an average infrastructure value of \$100 K, where 1500 tonne goes across the strip each year, the full cost of running that infrastructure is just over \$10/tonne. This cost would be over \$40/tonne at a low usage (250 t/yr), and get down to \$7.30 at 3000 tonne p.a.
- Where new strips are being built, there may be a case for syndication among neighbours to cover the capital outlay.
   There's no reason why this shouldn't work, as long is a robust agreement is drawn up around financing, ownership, tradability of interest, maintenance and operations. A separate account would be maintained to ensure transparent annual financing.
- Many strip owners will however prefer to control ownership and management of the strip themselves and rent the use of the strip. The trick is to get the users to understand the true cost of operating a strip, and the value of good all-weather infrastructure.

We acknowledge the assistance of Andrew Denniston, pilot and area manager for Aerowork Wairarapa (027 276-8518) and Derek Ramsay of Ramsay Earthmoving Mauriceville (06 372-5877) in the composition of this article.

An Irish daughter had not been home for over ten years.

Upon her return, her father yelled at her, "Where have ye been all this time? Why did ye not write to us? Not even a line. Why didn't ye call? Can ye not understand what ye put yer old Mother thru?"

The girl, crying, replied, Sniff, sniff...."Dad..... I was too embarrassed, I became a prostitute."

"Ye what!!? Get out of here, ye shameless hussy! Sinner! You're a disgrace to this Catholic family, so yer are."

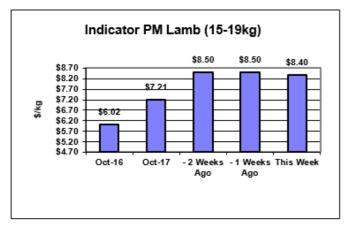
"OK, Daddy ... as ye wish ..." "I just came back to give Mammy this luxurious fur coat, a title deed to an eight bedroom mansion plus a \$5 million cheque. For me little brother Seamus, this gold Rolex. And for ye, Daddy, the sparkling new Mercedes limited edition convertible that's parked outside, plus a membership to the Limerick Country Club."

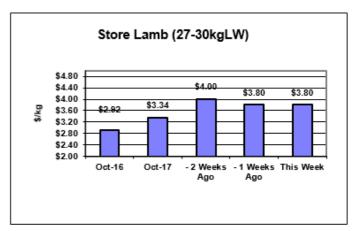
She takes a breath and continues, "And an invitation for ye all to spend New Year's Eve on board my new yacht in the Caribbean."

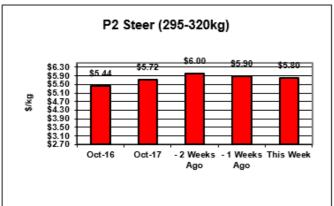
"Now what was it ye said ye had become?" says Daddy.

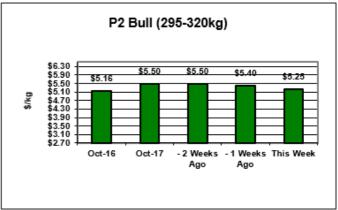
Girl , crying again, Sniff , sniff .... "A prostitute, Daddy !" Sniff , sniff .

"Oh! Be Jesus! Ye scared me half to death, girl! I thought ye said a PROTESTANT. Come here and give yer old Daddy a big hug."









#### **OTHER PRICES**

SI Lamb Schedule	\$8.20	SI P Beef Schedule \$5.60	
NI Local Trade Beef	\$6.00	NI 220-245 kg M Cow \$4.35	
NI 220-245 kg P Cow	\$4.35	NI Venison 60 kg stag \$11.50	

**PGG Wrightson Ltd Wool Sale Report** 

				20th September 2018		
US \$0.6619			=	Napier		
STRONG SEGMEN	T INDICATOR	328	-4			
TYPE QUOTES		SALE PRICE	YIELD	SALE PRICE	CHANGE ON	
		(Clean)		(Greasy)	LAST SALE	
H Fleece	33 <i>m</i> 2-3"	na	76%			
H Fleece	35m 3-4"	356	76%	271	-9	
H Fleece	37 <i>m</i> 2-3"	329	76%	250	-9	
Ewe Fleece	36 <i>m</i>	344	76%	261	-9	
Ewe Fleece	37 <i>m</i>	na	76%			
2nd Shear	37 <i>m</i> 2-3"	329	80%	263	-9	
2nd Shear	39 <i>m</i> 3-4"	338	80%	270	-1	
2nd Shear	39 <i>m</i> 2-3"	324	80%	259	+22	
Lambs	28m 2-3"	na	-	-	-	
Lambs	31 <i>m</i> 2-4"	na	-	-	-	

# **NOTICES**

**Four well-bred huntaway pups for sale**. 9 weeks old. \$150 each. Eketahuna based. Call Bruce on 06 375 8008.

**Hogget grazing available** for up to 800 ewe hoggets. Good quality ground 5 minutes east of Masterton. Call Sully on 027 4511 407 or <a href="mailto:sullyalsop@gmail.com">sullyalsop@gmail.com</a>

# STORE STOCK PRICES

(Sale yard prices unless stated otherwise)

		SOUTHERN NORTH ISLAND		CANTERBURY		OTAGO/SOUTHLAND	
Store Lambs (2017)							
Male & MS	38-42 kg	\$3.70 -\$3.80	=			\$4.00-\$4.10	
	35-38 kg	\$3.80-\$4.00	=	\$4.10	=	\$4.00-\$4.10	
	30-35 kg	\$4.20-\$4.30	=	\$4.20	=	\$4.00-\$4.10	
Ewe Lambs	30-35 kg	\$3.70-\$3.90	=			\$4.00-\$4.10	
	36-38 kg	\$4.00	=			\$4.00-\$4.30	
Works Ewes	22-24kg	\$5.00	Û	\$5.20	Û	\$5.20	
Heavy Export Ewes	28kg	\$140	Û	\$145	Û	\$145	
Ewes with Lambs at Foot	M/G Cond.	\$110 -\$112 ac	=	\$150-\$120	①		
Ewes with Lambs at Foot	L/M Cond.	\$95-\$107 ac	Û	\$100-\$105	仓		
2 yo Steers	400-450	\$3.45-\$3.50	=	\$3.15-\$3.20	Û	\$3.15-\$3.20	=
	350-400	\$3.50-\$3.60	=	\$3.20-\$3.30	Û	\$3.15-\$3.20	=
Dairy X	350-400	\$2.80 - \$3.10	=	\$3.00		\$2.90 - \$3.00	=
2 yo Heifers	380-420	\$3.10 - \$3.30	=	\$2.70 - \$2.80	=	\$2.80-\$3.00	=
Dairy X	380-400	\$2.60-\$2.80	=	\$2.50-\$2.90	=	\$2.70-\$2.80	=
2 yo Bulls	450-500	\$3.00-\$3.10	=	\$2.70-\$2.80	=	\$2.80-\$3.00	=
	400-450	\$3.10-\$3.15	=	\$2.70		\$2.80-\$3.00	=
Ylg Steers (Trad)	300-350	\$3.80 \$3.90	Û	\$4.00-\$4.20	=	\$3.80-\$4.00	=
Ylg Steers (Trad)	250-300	\$3.90-\$4.10	Û	\$4.00-\$4.20	=	\$3.80-\$4.00	=
Ylg Steers (Trad)	180-250	\$4.10-\$4.30	Û	\$4.00-\$4.20	=	\$4.00-\$4.10	=
Ylg Steers (Exotic)	300-350	\$3.50-\$3.70	=	\$4.00-\$4.20	=	\$3.90-\$4.00	=
Ylg Heifers (Trad)	200-250	\$3.20-\$3.40	=	\$4.00	=	\$3.50-\$3.80	=
Ylg Heifers (Trad)	170-200	\$3.40-\$3.70	=	\$3.80	=	\$3.50-\$3.80	=
Ylg Friesian Bulls	260-280 kg	\$3.40-3.60	Û	\$3.00	=	\$2.80 - \$3.00	=
Ylg Friesian Bulls	200-250 kg	\$3.50-\$3.60	Û	\$3.10		\$3.20	=

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