

DIGEST

SOUTH ISLAND
SUMMER 2016/17



Beat the heat this
summer

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BEAT THE HEAT THIS SUMMER

As the mercury rises, so does the potential for heat stress in dairy cows, along with associated production losses and health issues. However, with good management and a focused nutrition programme you're giving your herd the best chance to put in a sterling summer performance.

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SealesWinslow is a recognised leader in the production of high-performance compound feeds and feed additives. A fully owned subsidiary of Ballance, SealesWinslow has manufacturing sites located in Morrinsville, Ashburton and Whanganui, and supplies custom-blended pelletised feed to farmers throughout New Zealand. It also provides calf feed, mineralised molasses blocks, feed supplements and additives.

It's no secret that cows don't like the heat; their bodies are simply better suited to lower temperatures. When subjected to heat and humidity they struggle to regulate their thermal balance and respond in two ways: they disperse heat by panting and drooling, and they reduce the 'internal' heat production that results from rumen fermentation. Cows will therefore reduce forage intake and eat primarily during cooler times of the day.



Typical outcomes of this behaviour are a lower rumen pH, poor degradation of fibre and risk of SARA (sub-acute rumen acidosis), ultimately manifesting in reduced milk solids production.


SealesWinslow Nutrition and Quality Manager, Wendy Morgan, suggests tackling the issue in two ways. Firstly with good management by ensuring ready access to fresh, clean water; this is especially important directly after milking. "Be sure to check water troughs for level and flow rate," she recommends. "And keep bacteria and algal blooms at bay with regular cleaning. Over time, plant material, soil and other matter builds up and can lead to toxic compounds as it decays."

Also, don't forget about shade! If at all possible, leave paddocks with more natural shade to be grazed during the hottest periods.

The second line of attack is a feeding strategy with a focus on quality. It pays to avoid high fibre content as it raises the fermentation in the rumen and consequently increases the heat load on the cow. "To maximise pasture intakes, grass needs to have good sugar levels and sodium content," says Wendy. "A superb all-round option is an energy-dense feed, ideally a pellet containing protein and starch, as it helps to counteract the reduced dry matter intake."

Then there's the mineral balance: offering salt encourages water intake and helps restore mineral reserves that are depleted from sweating and drooling. It's hard to believe, but slobbering 100L/day is not uncommon for a hot cow!

MINIMISING HEAT STRESS

-  Water – clean, fresh, ample
-  Shade – graze paddocks with shade during hottest time
-  Mineral balance – offer salt
-  Energy-dense feed – offset reduced pasture intakes
-  Rumen modifiers – improve rumen pH and feed conversion efficiency
-  Avoid high-fibre feed – raises heat from rumen fermentation

And lastly, Wendy advises rumen modifiers for improving the rumen environment. She recommends an additive like Levucell, as it improves fibre digestion and utilisation of nitrogen. "This helps the animal effectively convert feed into milk solids, while also reducing the risk of SARA."

Feed conversion efficiency in heat-stressed cows can also be reliably boosted with Rumensin®.

Contact your local sales rep for a more comprehensive overview of how SealesWinslow products can help you reduce the effects of heat stress.



FARMING PROFILE

Achieving strong production results in Golden Bay can be tough given the region's hot and dry summers. And yet, Robert Rosser quietly pulls off top results on the family farm near Takaka. He does so by focusing on fundamentals, making sure the cows get their feed allowance, and sourcing value-for-money pellets.

The business end of Robert Rosser's family farm is 165 hectares of nearly flat land. The quintessential "born farmer" has worked there for 16 years and now manages it with a no-nonsense approach, making the most of the 550 cows despite the sometimes torturously dry summers.

"During summer we need rain every week to keep things ticking over," he says. "It gets tricky when there's none for a month." This farming challenge is partially managed with an irrigation system that covers 110 ha; when faced with additional water restrictions, Robert responds by splitting his herd and transitioning 150 younger animals onto once-a-day milking.

While improvements feature strongly on the farm, Robert is eminently practical and mindful of fundamentals. "I like to keep things simple," he explains. His approach is duly rewarded with near self-sufficiency as far as feed is concerned – he typically has enough grass, hay and balage for his herd. He provides additional pelletised feed during spring and autumn and appreciates the benefits: a higher stocking rate and better results for getting cows in calf.

However, in light of the current payout he is careful when making feed purchasing decisions. "At the end of the day it comes down to cost," he states, noting that SealesWinslow offers value for money. "We're really happy with the service. The product was awesome and the pricing was great too, which helps us because we can use more of it."

Robert's farming results are noteworthy given the once-a-day milking and the climatic constraints: last year he produced 1350 kg milk solids per hectare – a respectable result for Golden Bay. He aims to maintain or improve it, while also focusing on further "lowering the empty rate".

The animals are well-provided for with quantity and quality of feed, as well as adequate mineral intake. "In the springtime we get magnesium added to our meal," he explains. "By having it in the meal, we don't need to put it on the paddocks. It's a massive saving, and when it's wet you also know that the cows are still getting magnesium. It's fantastic and makes life just so much easier!"

At other times he uses a mineral dispenser. It allows him to purchase quantities of feed and add whatever minerals are needed at the time, rather than being constrained by what he has purchased in advance. He likes the flexibility of tweaking his feed strategy on an as-needed basis, while still ordering well ahead of time.

Importantly, he also feels he can rely on receiving products as ordered. This, he says, is particularly relevant once you've had a disappointing experience elsewhere involving the delivery of inferior product.

It's clear that quality, service, value-for-money and reliability are non-negotiable priorities for Robert. And let's face it, who would argue with that?



TARGETING YOUNG STOCK GROWTH

Now is a crucial time to make sure that young stock growth is on track. By employing the right management practices you'll give your calves the best chance to meet industry liveweight targets and protect your future income.

After a busy few months filled with calf-raising tasks, it's tempting to take a breather once the animals reach their first weight targets. But while the calves no longer demand daily attention, they should nevertheless remain front of mind.

For calves born in July and August, the current six-month milestone is particularly relevant because growth rates traditionally tend to slip from there. And given that weight – rather than age – determines an animal's maturity, reproductive performance and therefore future milk production, it's imperative that the stock gain weight at an appropriate rate.

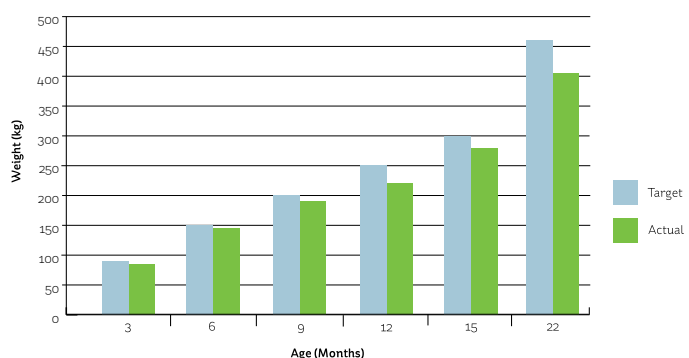
However, set-backs often occur; as documented in a 2012 LIC study, growth targets begin to slip after six months. By time the calves are 22 months' old, nearly three-quarters of them are 11% below target weights. The task at hand, therefore, is to manage the factors that trigger growth checks.

"Good monitoring and assessments are essential," says Wendy Morgan, SealesWinslow Nutrition and Quality Manager. "Regular weigh-ins help chart the progress and highlight any growth issues. It means you can respond promptly and effectively."

Of course, weight-loss is often stress-related, as can be observed when animals are transported. Stress increases when stock need to establish a new hierarchy at a different grazing property. Their bodies respond with increased cortisol levels, disrupting their metabolism – it basically diverts energy that would otherwise be utilised for growth. The best management response to avoid stress-related weight loss is offering a transition feed such as SealesWinslow's Weightgainer pellets – a superb nutritional option that's very convenient to use.

The role of supplementary feed also cannot be overstated when faced with feed shortages arising from summer droughts.

Target and actual weights



L R McNaughton & T J Loppell
Proceedings of the New Zealand Society of Animal Production, Volume 72, pp 120-122, Jan 2012

To avoid getting caught out, Wendy suggests pre-empting shortages and extending the available forage as much as possible. "A supplementary feed like Weightgainer is your best option for making the most of existing pasture while helping to maintain liveweight or prevent weight loss."

It's a cost-effective measure and it's specially formulated for the needs of young stock and when extra gains need to be made.

Contact your SealesWinslow representative to discuss how you can achieve good growth rates during this summer and beyond.



LAMBING SUCCESS STARTS HERE

Would you like to know how you can best influence your lambing percentages and achieve a higher twin ratio? Ruminant nutrition specialist, Paul Sharp, explains why pre-tupping management is a critical success factor.

When you think of lambing success, you'll probably picture healthy ewes with two lambs each, and in good condition. Well, this objective is definitely achievable, and it starts with pre-tupping management aimed at maximising ovulation rates and increasing in-lamb and multiple rates.

"Nutritionally, it all hinges on the weight and body condition score (BCS) of hoggets and ewes," explains Paul Sharp, SealesWinslow Science Extension Officer. Ewes that carry some extra body fat and are "flushed" have a much better chance of twin pregnancies and will grow a healthy placenta promoting better foetus survivability.

Look at weight and preferential feeding

"It's important that weight is monitored regularly in the lead-up to mating," advises Paul. "Don't leave it until tupping time to achieve weight gains. By then it's too late."

He illustrates the point with an optimum condition ewe with BCS 3; at 60 kg she is about 8 kg heavier than her counterpart at BCS 2. It would take 53 days for the lighter ewe to catch up and gain the additional weight.

That's why you'll want to identify these ewes early – ideally by putting your hand on their back to detect marginal differences. "Drafting will only establish the very lightest," says Paul. "You would miss the ewes that only need to gain half a BCS, and that's precisely where your easiest gains are! With preferential feeding, those ewes are the most efficient way to use available feed, and deliver the very best return for any purchased supplements."

For smooth ovulation and reliable pregnancies, ewes need to at least maintain their condition, but ideally they should be on a rising plane of nutrition. Flushing them prior to mating and for the first 17



Dietary Targets

Crude Protein:	10 – 12% minimum 14% for hoggets
Acid Detergent Fibre (ADF):	16% minimum
Energy:	10.5MJ ME / kg DM

days of mating on high-quality feed yields optimum results. For hoggets it's critical to ensure continued growth in the lead up and during tupping.

Focus on feed

Quality and quantity of feed are both important considerations, but perhaps never more so than during the first 10 days of pregnancy, when feed restriction will, in fact, jeopardise embryo survival.

As a rule of thumb, feed allocation should be around 2.5% of LWT in daily intakes – around 1.5 kg DM/day for a 60 kg ewe – making sure that any shortages (in quality or quantity) are addressed with suitable supplements or crops. It's also a good idea to test for mineral deficiencies such as iodine and selenium, the latter being vital for cycling and embryo implantation.

The rewards for optimised feeding are worthwhile: research* shows that you can achieve 6% increase in twinning per 4.5 kg of ewe LWT, increasing in linear fashion to at least 70 kg LWT. Further, heavy ewes maintained in high condition from weaning to tupping show improved reproductive performance, with increases in lambing up to 20% being documented. On the other end of the scale, barrenness surges below 45 kg LWT.

In the final analysis, it pays to calculate the value of increased lambing in relation to additional feed cost, taking into account that each additional kg LWT for mature ewes requires 40 – 60 MJ ME, with a weight gain of 150g/day being the upper end.

**Improved Lambing Percentage, K. G. Geenty, MeatNZ 1989*

PAUL'S TUPPING TIPS:

- Use ram harnesses and change colours every 10 days, for more accurate lambing times and better grass allocation
- Avoid tupping in paddocks that were used for intensive lamb finishing as the worm burden can be high (use a testing kit)
- Keep the rams in top health
- Lucerne is suitable for tupping as it is usually free of diseases or insect infestations that could affect ovulation

REGIONAL WEATHER OUTLOOK

The tropical Pacific exhibits mixed ENSO (El Niño-Southern Oscillation) signals, with some indicating La Niña status and others indicating neutral conditions. Sea surface temperatures (SSTs) in the central equatorial Pacific Ocean are below average, close to the threshold used to define La Niña events. Anomalously cold sub-surface waters are still present, but are now more confined to the central Pacific (near 140oW) than in previous months.

International guidance still slightly favours La Niña conditions (53% chance versus 46% for neutral) over the next three month period (November 2016 – January 2017) becoming less likely as we progress into 2017. However, neutral conditions are now much more likely than La Niña by February – April 2017: 74% chance for neutral, and only 22% for La Niña.

Despite the current borderline La Niña conditions, the circulation pattern expected over the coming three months for the New Zealand region is broadly consistent with the typical La Niña signature: higher pressure than normal is forecast to the south and southeast of the country, while lower pressures than normal are forecast to the north of the New Zealand, leading to more persistent easterly or north-easterly airflow than normal.

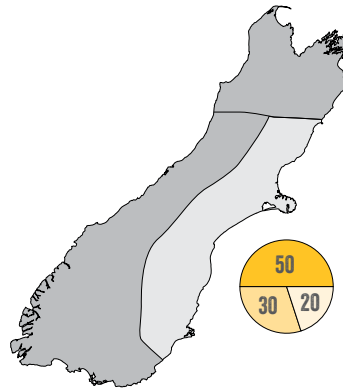
Regional Weather Outlook Continued

November 2016 - January 2017 temperatures are most likely to be above average (50-55% chance) for all regions of New Zealand. Sea surface temperatures around New Zealand are forecast to remain near or above normal over the next three months.

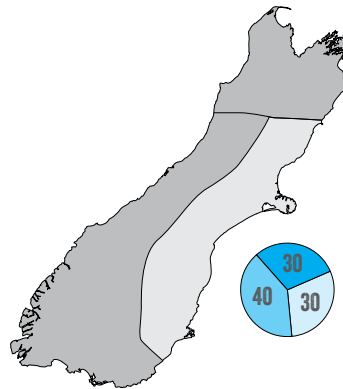
Rainfall totals in the north and east of the South Island are most likely to be near normal (40-50%), whereas rainfall in the west and south of the South Island is about equally likely to be near normal (40% chance) or below normal (35% chance).

Near normal soil moisture levels and river flows are most likely (45% chance) in the north of the South Island. For the rest of the South Island, soil moisture and river flows are about equally likely to be near normal (35-40% chance) or below normal (35% chance).

Air Temperature



Rainfall



Soil Moisture

