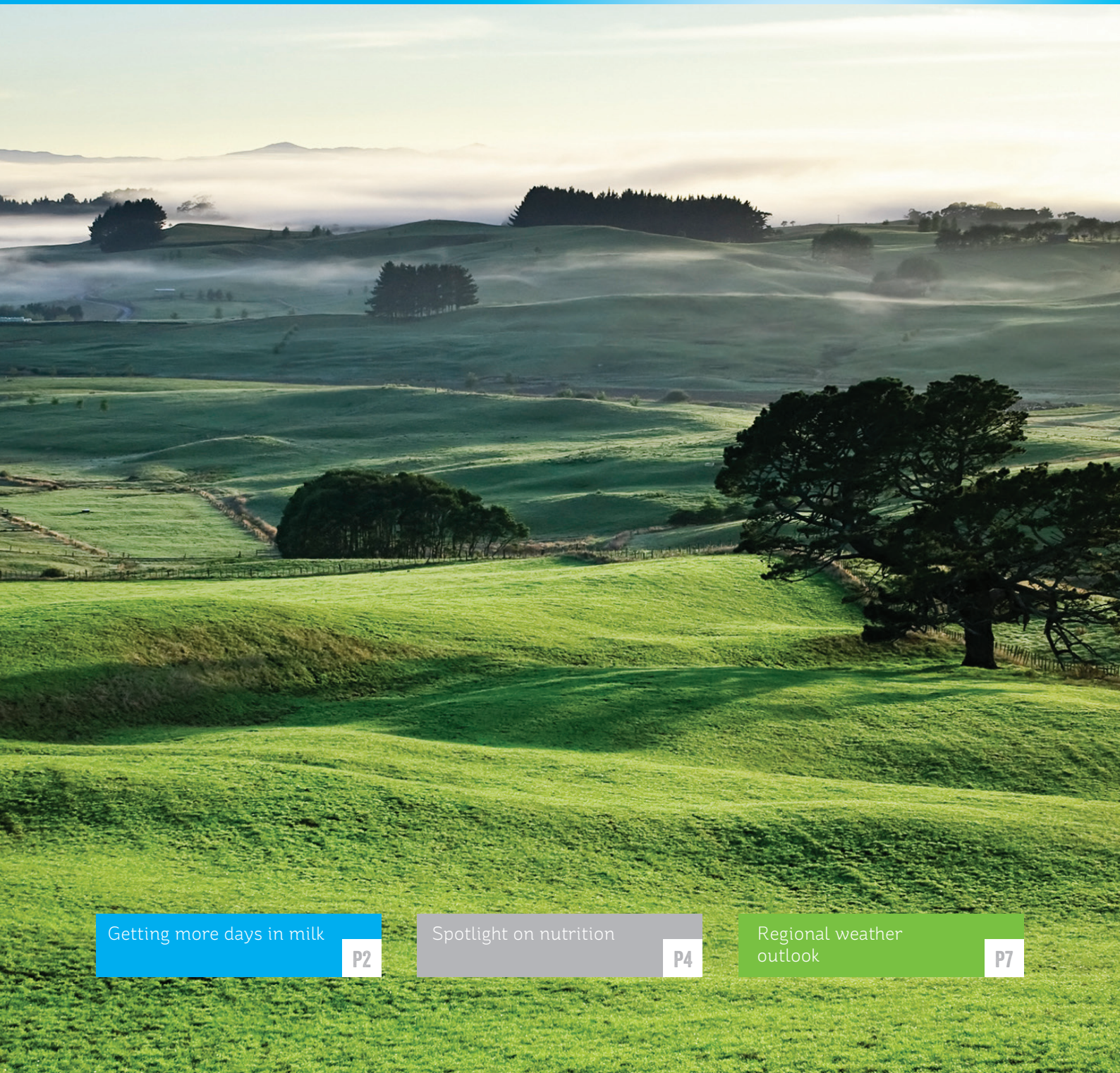


DIGEST

SOUTH ISLAND
AUTUMN 2016



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GETTING MORE DAYS IN MILK

New Zealand farms' lactation statistics leave room for improvement. Given their impact on the bottom line it may be a good time to take a closer look at farm practices.

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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.

The lactation period of a dairy herd is a key driver for farm profitability. Accordingly, most farming systems aim to have cows in milk for 305 days, with 60 dry days to maintain optimum udder health and get the most out of your high genetic merit cows.

Our farming reality, however, is quite different. Current DairyNZ statistics point to a rather more modest national lactation average of 273 days – 32 days short of best practice. In other words, the average farm could achieve a worthwhile lift in productivity by extending the lactation period.

While the reasons for the statistical productivity shortfall vary from body condition score to pasture covers, the path towards improvement can be readily evaluated on a case-by-case basis.

"A dry cow typically consumes eight to ten kg dry matter (DM) every day to maintain her body condition score over the dry period," says Science Extension Officer Natalie Hughes. "For Friesians on crop this can increase to about 15kg, which clearly represents a substantial cost of grazing, without a corresponding income from milk."



So what's involved in extending the lactation period and generating an income to offset the costs of dry cows?

"All things being equal, it's about quantity as well as quality of diet," says Natalie. In terms of quantity, she suggests a rule of thumb being four to five kg of DM per day. "This, in addition to the daily intake of a dry cow, is generally adequate to keep a cow in milk for longer."

In terms of quality, it hardly needs emphasising that DM isn't created equal. Even pasture – the easiest and cheapest form of DM – can vary tremendously.

While the boost in moisture levels throughout autumn traditionally brings improved pasture covers, it's unwise to assume it as being self-evident.

"Best farm practice is to get your pasture tested," is Natalie's advice. There really is no substitute for proper herbage tests. They are easily carried out and will tell you exactly what nutrients your pasture is delivering to your cows. "This is the basis for formulating a balanced diet, at any time of the year."

(See blue box for arranging tests through SealesWinslow)

Pasture that is high in fibre, for instance, takes up more space in the rumen – suboptimal for a pregnant cow whose stomach capacity is severely reduced in the final two months of gestation. But when you know this, you can easily respond with energy-dense feed. It takes up much less room, and supplies the cow with the nutrients she needs at a time when the foetus completes the majority of its development.

When buying in feed, it's important to focus on what nutrients it supplies. SealesWinslow's Home Run is a fantastic option in this regard as it offers processed starch in pellet form which is digested more efficiently and with less wastage (i.e. in the dung or uneaten) making more available for milk production. Home Run is formulated for year-round use and to keep cows producing longer. It may well be part of your answer to better production levels.

Food for thought?

Herbage Testing Made Easy

The right information at the right time can make all the difference.

At SealesWinslow we know the value of laboratory testing, and that's why we offer ready access to independent herbage tests to our customer base.

Simply contact us on 0800 287 325 or www.sealeswinslow.co.nz and our representative will call by to collect the necessary pasture samples.

Testing is carried out by an independent laboratory and gives you precise pasture information that is specific to your farm. The results will go a long way to help you make the best possible decision.



SPOTLIGHT ON NUTRITION

There are several factors that play a role in achieving a maximum return from your cows. Among the most important is providing the right mix of nutrients in the animals' diet. Our nutrition expert sheds some light on this matter.

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The correlation between feed input and (milk or meat) output is well known. Quality at one end invariably produces quality at the other end, too. It's about maximising the return on investment. All it requires is diligence and some simple nutritional measures – along with a basic understanding of nutritional principles. That's where SealesWinslow Nutrition and Quality Manager, Wendy Morgan comes in.

She has amassed a wealth of information and gladly shares it. When asked about the fundamentals, she stresses the primary importance of examining the feed on hand, and then "filling the gaps".

"Be aware that in practice you'll always have one nutrient that is what's called first limiting. It prevents the animal gaining maximum production, fertility and health," she explains. Say your cow has a good diet that falls short in one mineral, and let's assume the needs for that mineral are only met by 80%; then regardless of how well all other nutrient needs are met – the cow will only reach 80% of her maximum. If it's a substantial deficit, the ramifications can be significant. Think of it as a lowest common denominator.

To make matters worse, any effort and money spent on providing other/wrong nutrients is wasted.

Obviously, good pasture utilisation and management is key as it maximises the most affordable feed. Augment that with herbage tests (see article overleaf) and you're on your way.

"Knowing the dietary composition of pasture or any other feed is vital," stresses Wendy. "How else would you know what nutrients you need to add, if at all?" She notes that increasing numbers of farmers see the value in this approach. However, many traditionalists also draw on

historical practice. But with its reliance on seasonal weather, this method unfortunately fails to account for the erratic weather patterns that now dominate our climate. It requires additional information to make good decisions.

Once you know the limiting factor of your feed, you can make appropriate choices. Diets based on maize silage, for instance, offer good levels of fibre and moderate starch, but are lacking in protein and certain minerals. You therefore need to balance it with good-quality grass silage, pasture or a protein meal (cottonseed or soybean) plus calcium, sodium, magnesium and phosphorus.

Similarly, a diet high in fodder beet lacks protein, magnesium and phosphorus. While grass silage offers a better balance of nutrients, it has a low level of starch. In this manner, the dietary needs of the cow can be met year-round.

Wendy emphasises that a continuous effort is needed to avoid deficiencies that could otherwise occur. "Copper is often supplemented each year but if a cow uses her reserves through the season, while also being fed a diet low in copper, she may still develop issues later in the season," advises Wendy. The same can occur from a calcium deficiency, leading to milk fever, while a lack in phosphorus can manifest in 'creeper cows'.

But with good nutrition, you can mitigate all those risks while improving the return on your investment.

If you need help with diets and identifying limiting factors, expert advice is only a phone call away. Don't be left in the dark – call SealesWinslow and get some insight from one of our consultants.

An overview of common nutrients – function and deficiencies

Nutrient	Function	Deficiency signs
Copper	Boosts immunity, improves reproductive performance, important for bone growth, hoof hardness,	<ul style="list-style-type: none"> • Poor fertility • Retained placenta • Impaired immune system • Hair depigmentation, especially around the eyes
Selenium	Essential for immune system, protects against cell damage, helps convert inactive thyroid hormones to active form	<ul style="list-style-type: none"> • White muscle disease in newborns • Muscle stiffness • Retained placenta • Infertility – reduced ovulation / low sperm motility
Cobalt	Helps make vitamin B ₁₂ (essential for red blood cell production; energy production), required for rumen microbe growth, maintains nervous system integrity	<ul style="list-style-type: none"> • Rough hair • Loss of appetite and reduced growth • Impaired milk levels
Zinc	Improves hoof health, reduces somatic cell count, improves immune function, involved in enzyme function, helps maintain integrity of skin	<ul style="list-style-type: none"> • Loss of appetite • Bone problems • Delay in healing wounds • Weak hooves and horns • Reduced growth rates
Iodine	Involved in thyroid metabolism, muscle function, influences physical and mental development, influences metabolism of proteins, carbohydrates and lipids, assists production of various enzymes, important for reproduction, circulation	<ul style="list-style-type: none"> • Thyroid gland becomes over activated and enlarges • Foot rot • Retained placenta • Reduced voluntary feed intake • Reduced milk fat and milk yield
Phosphorus	Component of bones and milk, needed for energy metabolism, buffering systems, and by ruminal microbes for fibre digestion	<ul style="list-style-type: none"> • Rickets • Creeper Cows • Depressed dry matter intake and milk yield • Impaired fertility
Calcium	Component of bones and milk, controls nerve muscle and function	<ul style="list-style-type: none"> • Rickets in young animals • Osteoporosis in older animals • Milk fever
Potassium	Body water balance, muscle contraction, oxygen and carbon dioxide transport	<ul style="list-style-type: none"> • Lower dry matter intake • Lower water intake • Reduced milk production
Magnesium	Nerve function, muscle contraction, part of bone and some enzymes	<ul style="list-style-type: none"> • Anorexia • Excitability • Calcification of soft tissue



THE SEAL OF QUALITY

The importance of quality cannot be overstated when it comes to animal feed. Thanks to the FeedSafeNZ certification, farmers can rest easy in the knowledge that the health of their animals isn't being jeopardised by the very thing they're eating.

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Feeding your animals food that is of consistently high quality may not be top of your mind. It can be tempting to differentiate feed offerings on the basis of cost alone. After all, if two ingredient labels state the same contents, then surely the products themselves must be comparable. Right?

Unfortunately, this couldn't be further from the truth. That's why the NZ Feed Manufacturers Association designed an accreditation programme, which safeguards the quality assurance of New Zealand-produced stockfeed and mitigates risks in the manufacturing and use of animal feeds.

SealesWinslow Nutrition and Quality Manager, Wendy Morgan, is very excited about the programme. "It's gaining a lot of traction and is an important differentiator," she says. "Farmers are increasingly becoming aware of the risks associated with poor feed quality. They appreciate the peace of mind that FeedSafeNZ affords."

As you'd expect, the quality processes involved are comprehensive and stringent. They cover all areas of operation - from purchasing to production, storage and delivery. There's a great deal of testing at every step of the way to ensure that raw materials and finished products alike meet the expected specifications.

"For the farmer, this programme delivers tangible benefits," explains Wendy. "Take our sophisticated mixing systems for pellets. It ensures that we consistently produce a superior product, which not only contains the right proportion of ingredients when measured in bulk, but also when measured in mouthfuls. It means that the cow gets the same level of balanced nutrients with every bite."

You can't equate that with a feed where ingredients are casually combined. Think about the potential concentration of minerals and other nutrients, and you quickly recognise the importance of a

good mixing system. The excessive ingestion of an additive like Rumensin®, or a single particular trace element, for instance, can lead to toxicity or subclinical issues. Ultimately this can have a detrimental effect on the quantity or quality of your milk, not to mention your bottom line.

The programme also enforces a high standard across the supply chain and carefully scrutinises suppliers. "They all have to meet stringent quality standards," explains Wendy. "When we purchase supplies, such as minerals, we can be certain that they don't contain unwanted levels of heavy metals or other undesirable substances."

“Quality is never an accident. It is always the result of intelligent effort.”



Featured: SealesWinslow staff proudly stand behind the FeedSafeNZ quality. Pictured is the team at the company's facilities in Ashburton.

To monitor compliance, FeedSafeNZ collaborates with an independent third party, AsureQuality, to carry out annual audits. These are extensive by nature and cover every conceivable area of operation including mill cleaning and sanitation, record keeping, purchasing specifications, labelling and packaging, finished goods storage, and more.

The system offers total traceability so every single item can be traced every part of the way, and in

either direction. If you take a bag of feed you can identify transportation details, the manufacturing line where it was produced, the bin where it was stored, right back to the raw material supplier.

All in all, FeedSafeNZ deeply resonates with SealesWinslow's own quality ethos, which seeks to take unnecessary risks and nasty surprises out of the farming business.

REGIONAL WEATHER OUTLOOK

Strong El Niño conditions continued in the tropical Pacific during January 2016. Sea surface temperature anomalies still exceed +20C in the central and eastern Pacific, but have weakened slightly from the peak values in November–December 2015. International guidance indicates that El Niño conditions will continue (96% probability) over the next three months (February – April 2016) and will rapidly decay thereafter, with a return to normal conditions or a transition to La Niña conditions by August – October 2016.

For February – April 2016, above normal pressure is forecast to the north of New Zealand, while below normal pressure is expected to the south of the country. This circulation pattern is likely to be accompanied by anomalous westerly wind flows – a signature consistent with El Niño. On average, New Zealand experiences at least one ex-tropical cyclone passing within 550km of the country every year. For the current tropical cyclone season, the risk for New Zealand is slightly higher than normal.

Typical impacts from such systems include heavy rain and strong winds particularly for the northeast of the country.

February – April 2016 temperatures are forecast to be above average or average for all regions of the country. Sea surface temperatures around New Zealand are forecast to be near average to the west and below average to the east of the country.

February – April 2016 rainfall is forecast to be normal or below normal for the north and east of the North Island, and for the east of the South Island. All other regions are forecast to be most likely in the near normal range.

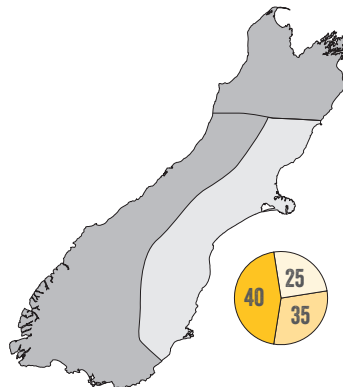
February – April 2016 soil moisture levels and river flows are forecast to be normal or below normal for the north and east of the North Island, and for the east of the South Island. All other regions are forecast to be most likely in the near normal range.

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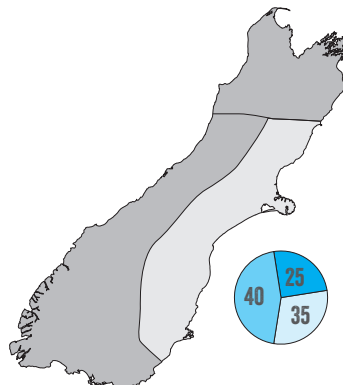
Regional Weather Outlook Continued

NIWA's latest Seasonal Climate Outlook states that February 2016 - April 2016 temperatures in the east of the South Island are equally likely to be near average (35% chance) or below average (25% chance) while rainfall totals are most likely to be in the near normal range (40% chance). Soil moisture levels and river flows are about equally likely to be in the near normal (40% chance) or below normal (40% chance) ranges.

Air Temperature



Rainfall



Soil Moisture

