

DIGEST

SOUTH ISLAND
AUTUMN 2017



When more is more

P2

Team snap-shot:
Natalie Hughes

P4

Making the most of
fodder beet

P5



WHEN MORE IS MORE

The profitability of a dairy farm largely hinges on the herd's lactation period. It's an obvious area for improvement, yet often remains overlooked. Paul Sharp makes a compelling case for optimising the days in milk.

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FACT: A modern dairy cow is readily capable of achieving a lactation period of 305 days.

FACT: According to NZ Dairy statistics, our average lactation period comes in at 273 days.

Since our national average falls well short of the benchmark, this might be a good time to discuss relevant issues and options. Is it worth trying to boost the days in milk by nearly 12%, or is it just a waste of effort?



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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.

Ask Animal Nutrition Specialist, Paul Sharp, and he'll tell you that fundamentally it's a straightforward equation. The underlying principle is that "a milking cow pays her way while a dry cow still incurs feed costs." So, the 8 – 10 kg DM/day that you're feeding a dry cow essentially represents a grazing expenditure that isn't offset by a corresponding income.

However, an additional 4 – 5 kg DM/day will keep the same cow in milk for another 32 days* producing some 1.2 kg MS/day. Importantly, the income more than covers the cost of feed at current payouts.

Paul also cites practicalities that support more days in milk. "Dry cows don't always receive the same level of attention and can easily lose further body condition which has an impact on the following lactation," he explains. It simply makes economic sense to extend milking, maintain cow condition scores, and then dry the cows off in a condition desirable for calving. "Putting on weight during the last two months of pregnancy is really challenging, because the cow's rumen capacity is severely reduced," says Paul.

There's also the little known fact that lactating cows are, in fact, physiologically advantaged and more efficient at utilising nutrients from feed compared to their dry herd mates.

**Based on national average - New Zealand Dairy Statistics 2014/15*

Paul acknowledges that the cost-effectiveness of a late-lactating cow comes down to a well-designed diet. Providing feed with the right nutrients is crucial during that time. "Continuing to milk into late lactation with insufficient energy content in the diet is a recipe for cows losing weight. It leads to problems for the following season," he says. "What they need is energy-dense feed that takes up less space in the rumen. It helps maintain lactation while also improving condition score through to drying off."

Farm economics obviously demand a cost-effective solution, which is where SealesWinslow's Home Run comes in. It provides optimal nutrition with processed starch in pellet form, is designed with efficiency in mind and makes more energy available for milk production.

Of course, in the final analysis, pasture remains the cheapest feed; optimising pasture intakes is the first priority. What's more, due to increased nutrient concentration during autumn, it will provide excellent protein and energy levels at this time provided growth rates are sufficient to meet feed requirements. However, to maximise milk production it's wise to undertake herbage testing. This allows you to determine the precise level of nutrients your animals are getting and to formulate a balanced diet.

Food for thought?

Contact your SealesWinslow rep to discuss your specific requirements and find out how we can help you achieve a healthier bottom line with more days in milk.



TEAM SNAP-SHOT: NATALIE HUGHES

Supporting productivity and animal welfare in the farming industry is SealesWinslow's lifeblood. This notion is personified by our top-notch team, who go the extra mile to achieve outstanding results for our farmers.

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Meet Science Extension Officer, Natalie Hughes. A townie by birth (she hails from Auckland), but a country girl at heart, her core role revolves around supporting the technical training for the sales team so they can assist farmers with the latest available information and research. It's about "making complex science easily understandable," she says.

She's as cheerful as she is passionate and knowledgeable about animal nutrition and animal welfare. In fact, during her study towards a Bachelor in Agricultural Science at Lincoln University, she was drawn to the science behind optimising animal performance. Such was her drive that she ended up taking every single animal paper on offer, followed up by a number of demanding research assignments including managing early fodder beet trials in 2009.

While she loved the academic rigour of research, she eventually moved closer to the "coal-face" and joined Ballance subsidiary Altum, before transferring to Taranaki and eventually being invited to join the SealesWinslow nutrition team. Since then, her understanding of pasture production and animal nutrition has helped to make a great impact; she is thrilled that she can now effectively transfer vital knowledge to farmers, allowing them to make informed decisions that promote animal health and production. Today, she gets many invitations to share her expertise at industry events where she talks about a variety of subjects from "achieving liveweight targets" to "intensifying sheep systems".

Much of her spare time is dedicated to professional activities, not least through her role as Dairy Women's Network regional convenor in Taranaki and an associate member of the NZ Association of Ruminant Nutritionists.



MAKING THE MOST OF FODDER BEET

Since its commercial introduction to New Zealand the popularity of the humble fodder beet has continued unabated. After all, its tremendous yield and high energy content makes it a most attractive choice of winter feed ... provided you make allowances for the bulb's nutritional constraints.

With yields of up to 30 tonnes of dry matter per hectare, fodder beet has gained a reputation for being a cost-effective crop, one that offers benefits to the farmer and the animals alike.

However, there's a proviso that needs to be kept in mind, namely the nutritional shortfalls of the crop. "Fodder beet has some inherent dietary constraints including low fibre content and low protein levels," explains SealesWinslow Nutrition and Quality Manager, Wendy Morgan. "Mind you, these are relatively easily addressed with some supplementary silage and straw."

There's also the issue of cows ingesting soil while grazing on fodder beet. The problem arises because of the high iron content in our soils which interferes with the absorption of copper and other essential trace elements.

But it's the bulb's very low phosphorus content that is the greatest cause for concern when you consider the mineral's implications for skeletal health, rumen function and milk production.

Farmers traditionally address this deficiency by dusting with dicalcium phosphate; but it's an unpleasant, regular and time-consuming task that offers moderate success at best and is also quite wasteful, as much of the phosphate ends up on the ground.

So what's the alternative? Wendy says that the easiest and most effective solution by far is to use SealesWinslow Fodder Beet Block. The molasses based block is formulated with phosphorus, magnesium, calcium, sodium, cobalt, copper, iodine, selenium and zinc; it provides the precise mineral needs for dairy cows and beef cattle that feed on fodder beet. The convenience of simply placing one tub per 25 animals along the fence line is as

compelling as its cost-effectiveness. That's why the Fodder Beet Block is fast becoming the supplement of choice on farms where cows overwinter on fodder beet.

DON'T FORGET ABOUT PHOSPHORUS

- Major component of the skeleton
- Vital for rumen function
- Needed for bone strength, energy metabolism and milk production
- Symptoms of low-grade phosphorus deficiency include reduced appetite and rapid weight loss
- Deficiencies are not immediately obvious as cows mobilise their existing phosphorus reserves first; effects typically show up at calving time or during early lactation.



MAIZE SILAGE: THE LONG AND SHORT OF IT

As a low-cost source of starch and fibre, maize silage is a popular feed option and a great companion to pasture for much of the year. Provided you make allowances for its nutritional limitations, it can be used as a profitable supplement for any dairy system.



Maize silage stacks are an increasingly common sight on dairy farms up and down the country. It's not surprising as farmers appreciate the cost-effectiveness and relative ease of producing bulk feed on-farm: harvesting the whole crop, chopping, compacting and ensiling it in stacks.

However, not all maize silage is created equal!

Science Extension Officer, Natalie Hughes points out that various factors influence its quality and nutritional value. Take the chop length, for instance. Longer lengths can create air pockets when insufficiently compacted, thus affecting the quality of the silage and producing harmful mycotoxins. Then consider the kernels themselves, which are a lead indicator for the starch content. Starch level is determined by kernel quality and quantity – not only cobs/kernels per plant but also a result of what is lost during harvesting. Kernels that are cracked open make it easier for rumen microbes to access

the entire kernel, especially its nutritionally loaded centre. Lastly, the silage quality is influenced by the dry matter (or conversely water content) within the stack as this drives aerobic activity; a higher water content means it takes longer for the silage to reach the target pH.

“Storage management also plays a huge role,” Natalie says. “You’re aiming for a silage pit that’s well drained and covered securely with strong plastic.” Effluent run-off and a poor stack face due to improper removal of silage during feed out will keep the bottom layer of the stack wet and promote mould growth.

It's obvious that all of these factors can significantly impact the nutritional value of silage. But how can you be certain? Natalie cautions against the eye-o-meter and highly recommends laboratory testing. “It specifies the dry matter content, the nutritional composition and the quality of fermentation within

the stack." This information is vital whether you're selling the silage or using it on your own farm.

Generally speaking, maize is nutritionally deficient in terms of calcium, magnesium, sodium and phosphorus. "Pasture simply can't compensate for the lacking trace minerals," states Natalie. "The only way to achieve a balanced feed and optimise milksolids production is by adding supplements that provide the minerals deficient in maize silage."

Armed with knowledge about the composition of your silage, you can make an informed decision about which supplement is best. The SealesWinslow range is comprehensive and includes Maizemax

Plus, Maize Silage Balancer (which also addresses the often low level of phosphate) and Maize Silage Balancer + Rumensin® to promote healthy rumen microbes. These concentrated blends of micro-nutrients are very easy to use and eliminate the problems associated with measuring and mixing your own blend. Ultimately you'll have peace of mind that your cows are getting the nutrients they require.

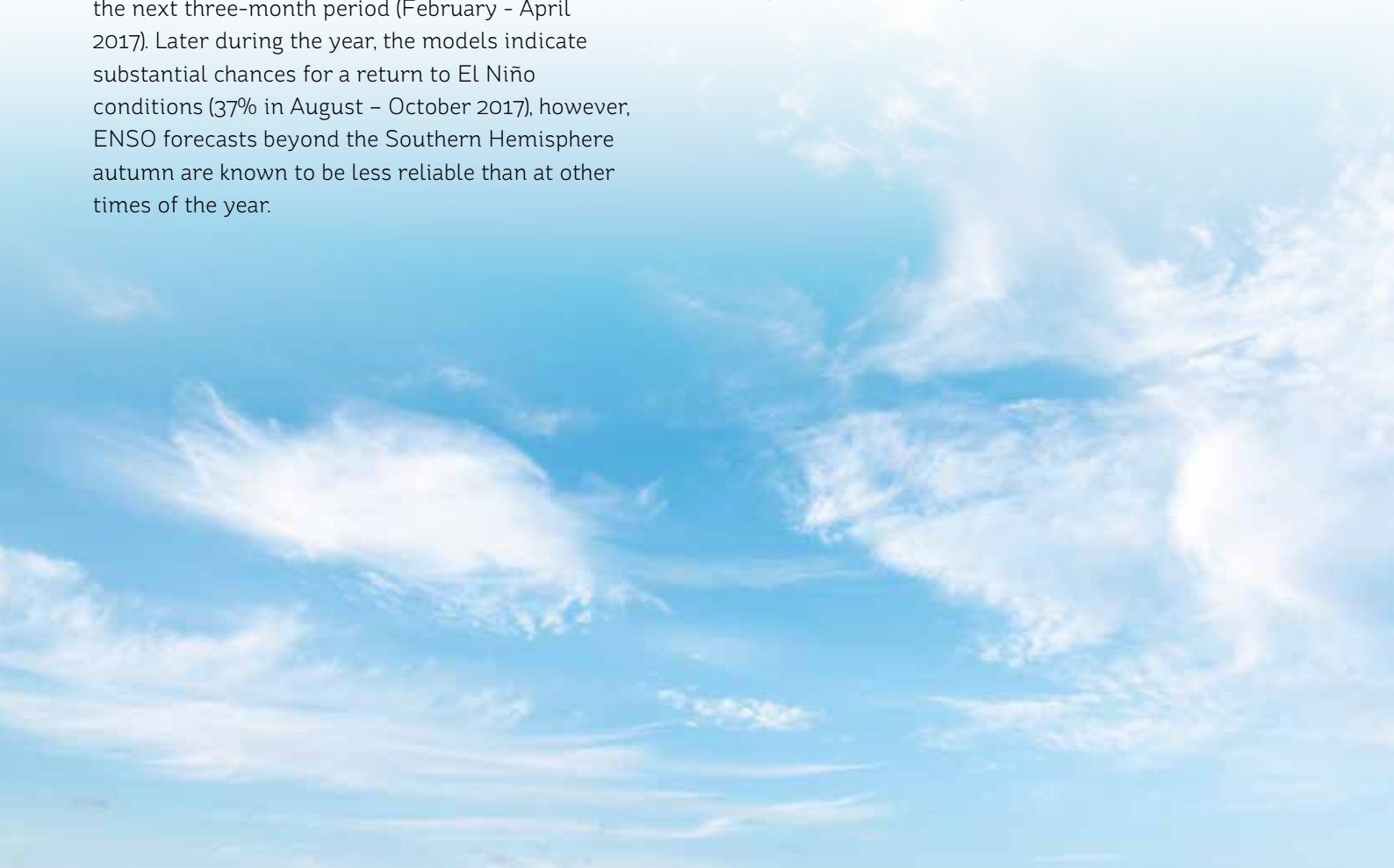
There's nothing to stop you from making maize an all-round profitable experience.

REGIONAL WEATHER OUTLOOK

The tropical Pacific is currently in an ENSO (El Niño – Southern Oscillation) neutral state (neither El Niño nor La Niña).

International guidance favours ENSO-neutral conditions with high probability (90% chance) over the next three-month period (February - April 2017). Later during the year, the models indicate substantial chances for a return to El Niño conditions (37% in August – October 2017), however, ENSO forecasts beyond the Southern Hemisphere autumn are known to be less reliable than at other times of the year.

With the likely persistence of ENSO-neutral conditions, and the anticipated absence of other large-scale climate drivers over the next three months, the atmospheric circulation around New Zealand is expected to favour only slightly more westerly to south-westerly wind flows than normal.



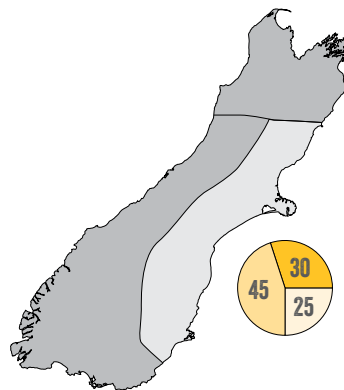
Regional Weather Outlook Continued

February – April 2017 temperatures are most likely (45-50% chance) to be near average for the east of the South Island. Seasonal temperatures are about equally likely to be near average (40% chance) or below average (35% chance) in the north and west of the South Island.

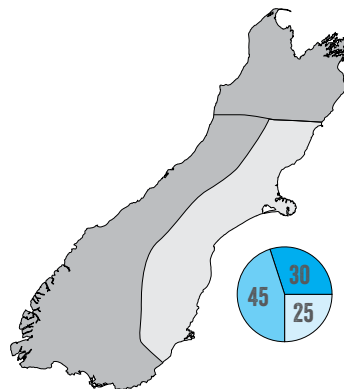
February – April 2017 rainfall totals are about equally likely to be near normal (40% chance) or above normal (35% chance) for the west of the South Island. Near normal rainfall is most likely (40% chance) for the north and east of the South Island.

February – April 2017 near normal soil moisture levels and river flows are most likely (40-35% chance) for all regions of the South Island.

Air Temperature



Rainfall



Soil Moisture

