It’s a year since we launched the Strategy for New Zealand Dairy Farming, which sets the direction of our investment of your levy for the next decade. This month we’ll be reporting DairyNZ’s progress on the Strategy in the last 12 months, outlining our targets for the next three years and the milestones against those targets. These plans are fundamental to the return on your levy and we’ll be updating you on this annually. This will be posted separately to all levy-payers, as well as available on our website.

This last season has been a bit of a rollercoaster ride to say the least, with New Zealand feeling the effects of the global recession and that being reflected in the milk price forecasts, going down and then up, and culminating in the second-highest forecast milk price ever. It’s a reflection of both the increasing volatility of the global markets and also the fact that the long-term outlook for New Zealand dairy products remains very positive. Our economics team recently completed an important project, looking at competitiveness of New Zealand dairy farming, analysing what our competitive advantages are against other dairy-producing nations and what we need to do to maintain this position. Understanding this is crucial to the continued success of our industry, and New Zealand’s economy, when you consider that 95 cents of every $1 returned from milk is earned overseas.

We’ll be discussing the competitiveness of New Zealand dairy farming at the first annual DairyNZ Farmers’ Forum, May 5-6 at Mystery Creek. I look forward to seeing as many of you as possible there.

I welcome your views on our work, you can email me at tim.mackle@ceo.dairynz.co.nz.

Tim Mackle
DairyNZ, Chief Executive

Improving animal performance

Cow performance – measured in milksolids production, reproductive success and animal health – is essential to farmers.

Lifting animal performance through genetic gain and improved management provides important opportunities to lift profitability and job satisfaction on all farms.

NZAEL oversees industry genetic gain

The New Zealand dairy industry has a long history of cow genetic gain, based on a unified approach to the collection and use of data to pursue a national breeding objective that has evolved to focus on maximising farmer profit from feed consumed – now measured by gains in Breeding Worth ($BW).

Three large trials over the last 30 years have confirmed the success of this approach in breeding cows that have a greater ability to produce milk, harvest feed and make money.

Along with these gains also came costs including increased cow liveweight, increased body condition loss and poorer fertility.

Bruce Thorrold
Strategy and Investment Leader, Productivity

Mystery Creek, Hamilton
May 5-6.

For more information or to send us your feedback, email insidedairy@dairynz.co.nz or ph 0800 4 DairyNZ (0800 4 324 7969)

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See pg 13
The dairy industry Animal Evaluation System (now managed by DairyNZ subsidiary company NZAEL) recognised these issues and has adapted over time to include a maintenance cost for liveweight and a breeding value for fertility that includes consideration of condition score.

This ongoing evolution of the Animal Evaluation System has recently seen the inclusion of genomic selection of young bulls into $BW.

An important NZAEL role is to ensure that farmers can use the $BW system to accurately judge the genetic merit of bulls being offered by companies selling a range of products, including progeny tested bulls, genomic selected bulls and unproven bulls.

Each of these approaches to sire selection is soundly based, but has different costs and risks.

New Zealand dairy farmers are fortunate to have a mix of commercial AI providers who all support a national breeding objective, while innovating and competing to bring farmers a range of cost-effective solutions to genetic gain.

This combination of competition and cooperation is not seen in all dairy countries, and is an important source of competitive advantage to New Zealand dairy farmers.

DairyNZ is determined to work with industry and farmers, at times in a tense competitive environment, to maintain confidence in the value of genetic gain and a national breeding objective.

**New opportunities for genetic gain**

All genetic gain is based on measurement of desirable traits or performance in cows.

When these traits are easy to measure (e.g. milk yield, liveweight) genetic progress is easy, but when the traits are difficult to measure (especially on-farm) then new techniques are required.

In this edition of Inside Dairy we highlight studies that are attempting to find new avenues for genetic gain.

NZAEL is investing in new ways to support change on-farm in areas of animal performance.

Measuring individual animal intake is nearly impossible on-farm – but scientists believe that differences exist between cows in their metabolic efficiency that would lead to productivity gains.

To test this idea, DairyNZ is co-funding a large study measuring both individual animal intake and performance.

Other studies are making detailed measurement of lameness, hoof growth and mastitis, and linking these to both traditional ancestry analysis and modern gene marker techniques.

Because of the efficiency by which genetic gain is delivered to farmers by the AI companies, gains in productivity can be rapidly and widely adopted on-farm.

**Farm management skill and stockmanship**

While genetic gain can raise the potential performance of the national herd, survey work shows that many herds are performing well below potential for reproduction and mastitis.

DairyNZ is investing in new ways to support change on-farm in these important areas of animal performance. Healthy Hoof and InCalf are two packages developed by DairyNZ to be delivered to farmers through veterinary businesses.

These packages include reference materials, tools to identify priority areas (Fertility Focus Report) and actions that farmers can implement to lift performance.

The important relationship farmers have with their vets provides opportunity for external and regular support for farmers in this process, either through Farmer Action Groups or consultancy.

The wide range of factors that can influence reproductive performance require a farm specific approach – bull management and numbers, staff training in animal health recording and heat detection, along with feed management, are common areas for improvement.

A mix of commercial products, farm management skill and stockmanship are required to achieve long-term high animal performance.

DairyNZ investment plays an active role in all these fields – often working with commercial companies to ensure rapid delivery of solution to New Zealand dairy farmers.
Delving into feed conversion efficiency

Rearing young stock may be cheaper in future, thanks to an apparent difference in feed conversion efficiency.

Early results from the Feed Conversion Efficiency (FCE) Trial indicate some calves convert feed into liveweight gain more efficiently – a finding which could lead to significant cost benefits for rearing young stock.

The search is now on to find a genetic marker to identify more efficient animals through a simple blood or tissue test, because phenotype selection on-farm is not possible. Long-term, a measurement will potentially be added to the BW calculation.

The $16 million Feed Conversion Efficiency Trial, funded by government and by New Zealand dairy farmers, is a collaboration between DairyNZ, LIC & NZ Trade and Enterprise with a sister trial in Australia.

FCE project leader and DairyNZ senior scientist Kevin Macdonald says the ultimate aim of the project is to increase productivity in the dairy industry through the conversion of feed to milksolids, via improved genetics.

And a difference in the feed intake of calves is exactly what scientists behind the project had hoped for.

The trial showed that the more efficient calves (15 percent of those studied) needed 1.25kg DM/day less for the same weight gain. This is about 10 percent less than the average.

The 15 percent of calves deemed least efficient ate about 9 percent more feed.

“In if they are going to eat less and add the same weight, even for calves that means there can be a saving in terms of rearing costs,” says Kevin.

Once the technology is there to identify these animals easily, the financial benefits to farmers could be significant, says Kevin.

In 2007, the first of the 1000 weaners selected for the six year FCE trial spent 60 days in a purpose-built feeding facility at Westpac Taranaki Agriculture Research Station (WTARS) near Hawera.

The calves in the trial have a BW of 180-200. Their genetic merit will be similar to average calves that will be born in the industry in 2015.

To date, more than 800 calves have been evaluated through accurately measuring the amount of cubed lucerne eaten to determine whether some gain weight more efficiently than others.

The initial results on liveweight gain are just the beginning.

Calves in the top and bottom 10 percent for conversion efficiency will be retained for future research looking at feed intake and subsequent milk production.

Testing will ensure the efficient animals do not have adverse traits such as low production ability or large liveweight losses.

“Now what we have to do is conduct feeding work to see if the differences identified in calves as liveweight gain are still present in milking production.”
Genomics accelerates change at NZAEL and on-farm

New Zealand Animal Evaluation Ltd (NZAEL) manager Bill Montgomerie has managed the national dairy herd’s genetic information for over 10 years. Now, he is excited about the future of genomic data and its potential for the New Zealand dairy industry.

Genomic data will speed up genetic improvement.

Planned animal improvement through breeding has large long-term effects and makes up over a third of long-term productivity improvement in New Zealand dairy systems.

The introduction of genomics is an exciting technology key to enhancing the national herd.

DairyNZ has funded the development of techniques to integrate genomic data with traditional herd data. This will enable New Zealand farmers to quickly take advantage of new knowledge about young bulls for siring herd replacements.

Within a year or two most dairying countries with advanced animal improvement programmes will incorporate genomic data in genetic evaluations. This technology will increase rates of genetic improvement by at least 25 percent.

In New Zealand, genomic enhancement for estimating BW was adopted in June 2009.

“Less than a year down the track, we have 5000 genotyped animals incorporated into our animal evaluation (AE) system,” says Bill Montgomerie, NZAEL manager.

Most of these genotyped animals are sires with large numbers of recorded progeny and their contribution is essential for deriving genomic predictions. Around 600 are young bulls that do not yet have progeny with herd test records.”

The top 30 of these young bulls averaged a BW over $293 with average reliability of 61 percent (February 2010 evaluation).

In contrast, the top 30 progeny-tested bulls on the Ranking of Active Sires (RAS) List (at the same evaluation) averaged BW over $259 with average reliability of 86%.

NZAEL Manager Bill Montgomerie
What is genomic selection?
Breeding companies practice genomic selection by obtaining genomic data and merging it with historic performance data. This increases accuracy in estimating genetic merit of young bulls before their progeny have performance records.

Practising this form of young sire selection will speed up overall rates of animal improvement by shortening generation intervals. The technology’s full potential will be realised when breeding companies undertake genomic screening of large numbers of young animals.

How is DairyNZ involved?
Through its subsidiary, New Zealand Animal Evaluation Limited, DairyNZ provides software to breeding companies so they can provide genomic data for the AE system in a common format that can be included in AE.

What has happened so far?
Some bulls that have been on lay-off while awaiting progeny tests have been returned to service early, based on genomic predictions derived from their DNA profiles.

How accurate is it?
For individual bull evaluations, it is not as accurate as progeny testing. Roughly speaking, the current genomic technology generates about the same amount of genetic information as 10 daughters in a progeny test, whereas progeny testing has usually been based on 80 or 100 daughters per bull. However, for speeding up genetic improvement the trade-off in accuracy is more than compensated by shorter generation intervals.

How should it be used on-farm?
Genomically-enhanced BW estimates for bulls without herd tested progeny are less accurate than the conventional BW for progeny-tested bulls.

This means farmers should not try to get a high proportion of their herd replacements sired by only three or four genomically-selected bulls.

The following table shows the size of the group of bulls farmers need to select in order to match the same risk reduction achieved with a group of eight progeny-tested bulls. Note that an important assumption is all the sires in the groups are used equally on the farm.

<table>
<thead>
<tr>
<th>Progeny testing</th>
<th>Genomically selected young bulls</th>
<th>Young sons of progeny tested sires (no genomic selection)</th>
<th>Young sons of sires that have no progeny test (no genomic selection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW Reliability for individual bulls</td>
<td>85%</td>
<td>55%</td>
<td>35%</td>
</tr>
<tr>
<td>Number of bulls in group</td>
<td>8</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Expected range of average BW for the group</td>
<td>Group average ±$21</td>
<td>Group average ±$21</td>
<td>Group average ±$21</td>
</tr>
</tbody>
</table>

Genomic selection progress

- There is rapid international adoption of the new technology. Affordable genomic data for cattle became available towards the end of 2007. By January 2009, the USA Department of Agriculture released official genomically-enhanced estimates of genetic merit of dairy bulls.
- Breeding companies practice genomic selection by obtaining genomic data and merging it with historic performance data. This increases accuracy in estimating genetic merit of young bulls before their progeny have performance records.
- The technology will increase rates of genetic improvement by at least 25 percent in New Zealand.
- Using young, intensely-selected AB bulls to sire replacement heifers will increase and farmers should select these sires as groups of young bulls.
- By August 2009 about a third of the active sires being marketed in North America were young bulls selected on their genomic information prior to progeny test.
Gene discovery for genetic gain

Much of the variation seen in animals is determined by genetics.

By Matt Littlejohn, DairyNZ Scientist
Richard Spelman, LIC Research Leader, Genomics

Progress in animal breeding relies on measuring this variation, in important traits such as milk production, feed conversion efficiency and disease resistance.

Finding the genetic source of this variability allows us to improve the performance of the national herd through genetic testing and breeding faster than with conventional animal breeding.

DairyNZ, LIC and ViaLactia Biosciences are working together to discover the genes for important production and health traits. These discoveries will be used to speed genetic progress and deliver improved genetics to the New Zealand dairy farmer.

A few such discoveries are already being used by farmers – selection of bulls carrying two different milk production genes has produced annual improvements in milk fat and protein since their first application.

In the last two years, gain has been further extended through LIC’s application of genomic selection technology.

A number of exciting new projects seek to find the individual genes underpinning a broad range of dairy traits. These projects give an indication of the breadth of genetic research being conducted by DairyNZ, LIC and ViaLactia Biosciences.

Mastitis Project

A previous study that measured animal mastitis histories and cow responses to mastitis-causing bacteria identified a number of cows that showed resistance to mastitis.

Using the latest DNA sequencing technology, hundreds of genes within large stretches of DNA are being screened for their link to mastitis resistance.

Genes identified as giving increased mastitis resistance will then be tested in large herds to validate the genetic effects in the wider cow population.

Once proven, the best genes can be spread throughout the New Zealand dairy cow population via genetic testing and breeding.

Once-A-Day Milking Project

Milk yield under twice-a-day milking is not a great predictor of how cows will perform under once-a-day (OAD) milking. Gene discovery may help to quickly identify the animals well suited to OAD.

In a previous study, cows carrying a particular version of a gene associated with milk production appeared to resist the normal drop in milk production associated with being milked OAD.

A new study will test the effect of this gene on milk yield in over 1800 animals milked OAD in a large commercial dairy farm in Canterbury.

Cows will also be genotyped to attempt to find additional indicators of OAD suitability.

If markers are shown to predict a cow’s suitability for OAD milking, these will be used to breed cows able to offset production losses and boost the overall profitability of OAD systems.
To better address the problem, DairyNZ funded the South Island Lameness Project (2005-2010), led by Dr Jim Gibbs at Lincoln University. This developed a new, simple, diary-based system for recording all individual lame cases on more than 50 South Island farms, teasing out the level, times and types of lameness seen in large herds.

"By joining the details of the farms' management, production, and region and geography to this individual cow information, a fresh approach to the long-term control of lameness was generated," says Jim.

Influences on lameness

Three previously unidentified influences on lameness became apparent in this project. These include: the longer walking distances of larger herds; a general association of herd lameness with higher production farms; and the skewed distribution of lame cases within a herd (a select group of cows within herds were more frequently lame, while another select group was never lame).

"This non-random distribution of lameness observed within herds across different regions could be the result of several influences, but one explanation was that not all cows in the population were equally likely to become lame in their environment."

This signalled the possibility to identify traits associated with reduced or increased lameness, offering the potential for a robust way to select against herd lameness.

Hoof growth was one trait identified in the project’s early years and was further researched.

Greater walking distances generally increases hoof wear, which can lead to reduced hoof thickness and an increased likelihood of injury and subsequent lameness.

"Hoof growth and wear can be accurately measured on-farm and identification of higher growth individuals is one potential tool for selecting against lameness."

In 2009-2010, the project has assessed the rates of hoof growth and hoof wear in a number of different sub-populations of the herds on typical South Island herds in Canterbury, Otago and Southland.

Preliminary results to date suggest while there is a strong influence on growth and wear rates by the environment at the ‘herd level’, there is marked differences between individual cows in both hoof wear and growth (>25%). There is also observed differences in individual cows across the lactation period (>20%).

Several specific environmental influences on growth and wear rates have also been identified. The research is continuing with an additional emphasis on further defining the sub-populations in herds that are both high MS production and ‘lame proof’.

Valuable database

This research project is ongoing and includes increasingly refined assessments of the valuable database of 30,000 individually identified lame cases developed through the early years of this project.

These records are being used to assess if particular genotypes of ‘lame prone’ and ‘lame proof’ lines can be identified. If so, it may be possible to match these to any specific traits shown to be associated with lameness in the broader project work.

This fresh research is a significant effort to provide further tools for the dairy industry to control herd lameness. The research may ultimately lead to a trait or traits suitable for use in selection against lameness, which is a necessary advance for controlling lameness in the New Zealand dairy industry in both the medium and long-term.
Trust BW – it’s good for business

The beauty is in its simplicity.

The BW system has standardised breeding in the New Zealand dairy industry and is a simple way to identify animals whose progeny will be the most efficient converters of feed into profit.

Fourteen years since BW replaced the old BI system, the value of genetic improvement continues to rise. One year’s genetic improvement is worth $40 million to the national dairy industry. On a per farm basis, that’s $3500 a year.

New Zealand Animal Evaluation Ltd manager Bill Montgomerie says long-term, the industry reaps the rewards of animal improvement, as over a decade each farm’s profitability rises by $35,000 – or $400 million industry-wide.

DairyNZ has tested the value of genetic improvement in research trials and found that high BW Friesian herds in the Strain Trial achieved $650 more profit per hectare than low BW herds.

The high and low BW herds were separated by 25 years of genetic improvement, so the advantage was equivalent to $26/ha/year ($8/cow/year). This rate of improvement was consistent with the BW difference between the herds.

Taking advantage of this improvement is as simple as farmers using high BW bulls to breed replacements.

“Farmers don’t have to use BW any further than that, if they don’t want to,” says Bill. “The goal is breeding good replacements and culling off those by PW (production worth) rather than BW, which will see animals getting better year by year.

“The benefits are permanent and accumulative. Continuous investment in it is so important. Farmers can be confident that the BW system is delivering them better cows.”

The farmer support for BW is a real plus, says Bill. This sees over 90 percent of replacement heifers being bred by carefully selected AB bulls. “That’s one of the fundamental reasons why the system can work well.”

Local breeding caters for New Zealand’s primary trend for grazing and a tendency toward cross-breeds.

“We are the only country which developed a BW system that can be understood to give good information for animals of different breeds. And we had to do that – farmer demand was for Friesian, Jersey and crossbred cows – and we wanted to know how efficiently they are producing.

“We have to take liveweight seriously, as an economic factor for animals of different sizes.

“If we practised selection for large cows in New Zealand – the large cows that Australians favour – we would increase the feed necessary for body maintenance of the national herd by eight million big round bales of baleage each year.”

Imported bloodlines do play a key role in New Zealand breeding, with breeding companies’ testing to ensure the individual bulls fit in our system.
Inside Dairy

The BW system – what we think

Looking to the future

Philip Luscombe
New Zealand Animal Evaluation Ltd
Chairman

“In NZAEL, we value the trust farmers have put in the BW index, and it’s well-founded because it’s based on good science and on-farm testing/validation,” says Philip. “The BW index is widely used, accepted, trusted.”

Philip says a common index system not only allows for comparisons and the ability to track genetic gain, but also increases the rate of animal improvement.

“Looking forward, one of our big opportunities is to gain even more benefit from using additional genomic data, as it is incorporated into the index. Where we are going with genomic data is very exciting, as it has the potential to increase the profitability on-farm, from animal breeding decisions.”

Room for improvement

CRV Ambreed
– Peter Berney, Marketing Manager

“CRV AmBreed fully supports a national breeding objective that focuses on profitability for dairy farmers. We believe that one of the most important drivers of profitability within the range of New Zealand dairy farming systems is longevity,” says Peter.

“While the BW index brings good focus on balancing production with efficiency and fertility, we believe it could be improved by more focus on the critical structural elements of a long-lasting dairy cow that can only be improved through breeding such as capacity, rump angle and udders.

“It is important to note that the BW system itself has evolved over time with addition of BVs such as fertility and SCC into the index, many of them driven by farmer observations on the shortcomings of the system and their demand for better performing animals. CRV Ambreed supports ongoing debate and improvement to the BW system.”

The farmer’s point of view

Steve Ireland – Temuka dairy farmer, bull breeder and New Zealand Animal Evaluation Ltd board director

“As farmers and breeders we want everything. Efficient, high producing, healthy, long-living cows that get in calf every 365 days,” says Steve. “Dairy cows have evolved over the years and are much more manageable now compared to 30 years ago.”

“All farmers deal with these challenges and generally have the same requirements, which is why the Animal Evaluation Unit and farmers have developed the national breeding objective across all breeds, incorporating estimations for production traits and liveweight efficiency, fertility, SCC and longevity traits.”

A simple system

Peter Gatley – LIC General Manager, Genetics

“BW is remarkable because it involves complex calculations of what each trait is worth, it weights them accordingly and distils it all down to single number,” says Peter.

“The units are dollars of net profit to the farmer, which makes it easy to quantify the benefit and it is an across-breed index, so farmers can make good decisions even when cross-breeding. It also serves as a currency for valuing animals on a simple scale, regardless of the breed of the cow or where she has come from.

“As long as the primary goal of net farm profit is retained, and decisions are based on science and economics, then we can’t go wrong. I feel strongly about this, I’ve seen the industry before BW and after its introduction. I know which works better.”

Driving for profitability

David Hayman – Liberty Genetics, Managing Director

“The BW system drives for profitability, so it includes both the feed cost and the income generated from dairy cow production. Most overseas systems don’t measure feed conversion efficiency and the New Zealand system leads the world in this respect,” says David.

David credits the Animal Model and BW system with significantly increasing the rate of genetic gain, which has doubled since the late 1980s-early ’90s.

…”

(cont’d p10)
Genetic and phenotype trends (milk solids per cow)

- Milk solids production per cow has increased by 22% since 1992, due to increased feed intake per cow.
- Genetic gain in production ability ensures that increased per cow performance is profitable for farmers. This is because genetic gain leads to cows with bigger appetites that can increase per cow production without reducing per hectare pasture harvest.
- The little diamond entries show the variability that affects production circumstances, such as a very dry summer in the North Island in 1999.

DairyNZ tools and tips

All you need to plan your career in the dairy industry is now in one place

DairyNZ’s Career Pathways includes planning resources, creates customised career maps and helps you make informed decisions about your career plans and training needs. All via a portable USB flash drive. Find out more or order your own at dairynz.co.nz/careerpathways

Discover your personal and farm business potential

DairyNZ Mark and Measure seminars are two interactive two-day seminars designed for dairy farmers and their partners to unlock the potential of their farm business to deliver the profits and lifestyle they deserve. Run this year in Taupo and Queenstown during May and June respectively, farmers need to book early to avoid disappointment. For more information or to book visit dairynz.co.nz/markandmeasure

As simple as www.dairynz.co.nz

Each month to the site has thousands of visitors who access dairy farming information and expertise from DairyNZ. You can find it all here including:

- Farm management advice
- Events calendar and registration
- Seasonal reminders
- Industry research updates
- Farm business tools
- Latest industry news
- Publication and tools orders.

It’s all just the click of a mouse away!
New farmer groups have been designed with the future in mind.

“We are giving farmers, at different points in their careers, the opportunity to step up; to become more business and people savvy and to enhance their careers as a result,” says DairyNZ People and Business Development Team leader, Geoff Taylor.

“DairyNZ knows from farmers’ surveys and feedback that most farmers rank business management skills as being vital to the success of their business and their progression through the dairy industry.”

Tailored to meet the needs and build on the experience of those involved, these groups focus on skills that farmers can apply directly to their chosen career pathway.

Geoff says that each course will feature contributions from local farmers, rural professionals and industry experts. “Practical exercises will be used throughout, providing each participant with direct experience.”

**Effort equals reward**

Farmers who choose to attend their local course become part of a group of 15-20 like-minded, progressive farmers. Each course is made up of key topic areas presented in regular, largely classroom format, sessions in your local area. Groups will be carefully made up, ensuring complementary skill and motivation levels.

Farmers will need to commit to regular attendance and contribution.

Geoff says that effort equals reward. “This investment of time and effort will ensure your skill level, career and network of farmer contacts is enhanced.

“Numbers are strictly limited. Register your interest early to avoid disappointment.

For more information contact your local DairyNZ consulting officer or call the DairyNZ Farmer Information Service on 0800 4 DAIRYNZ (0800 4 324 7969)

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**Get involved in your local Progression Group**

**DairyNZ Progression Groups** will be offered nationwide from May 2010 for two key groups:

**Biz Start**

Designed for lower order sharemilker, herd manager and farm manager

Sessions will focus on building fundamental business and people management skills to equip them for senior level management positions, or owning or running their own farm business.

**Biz Grow**

Designed for sharemilker and equity partner

Sessions will focus on strategic financial and performance management to equip participants for greater equity holding or owning their own farm business.

**To register your interest, or recommend one of your team, visit the Progression Group registration form at dairynz.co.nz/progressiongroups**
Excellent animal management decisions? No probs.

**DairyNZ’s stable of animal management products is growing fast.**

Healthy Hoof and InCalf are two well-established DairyNZ tools set to be joined by the new SmartSAMM, a mastitis management programme currently in development.

DairyNZ product manager Emile Stanz says the development process sees tools, including Healthy Hoof, InCalf and SmartSAMM, all trialled and tested on-farm in New Zealand conditions.

“This way they have proven the advantages to farmers, assisting them in making the right decisions when it comes to the management of lameness in herds or improved herd reproductive performance,” says Emile.

“Healthy Hoof is a year-round programme designed to assist in making the correct decisions to bring about change.

It helps farmers identify risk areas on-farm which are potential lameness triggers, and assists in drawing up the necessary action plans to overcome and improve these areas.

“You can prioritise the changes identified and start changing these now.”

The farm diagnosis and action plan is followed up by staff training in prevention and treatment, and a review at the end of the season.

Healthy Hoof and InCalf are available through an excellent rural professional network, such as veterinarians.

Over time, lameness can be reduced to more acceptable levels and farmers can decide how quickly they want to do that. It will show the areas of change, allowing farmers to plan and budget in the business.

Like Healthy Hoof, the InCalf programme has been developed to suit New Zealand farming conditions and seasonal calving.

Initially developed in Australia, InCalf was adapted to New Zealand and is delivered on a year-round basis, taking farmers through the four phases in the season – calving, mating, mid-lactation and the dry period.

“Each of these phases consist of a planning/prepare session and a review session, enabling planned implementation of InCalf and the chance to see what’s been learnt,” says Emile.

InCalf determines the economic gap in your herd’s reproductive performance and through various other tools, such as calving pattern, body condition score and heifer rearing, assists in planning necessary changes.

“This process is a multi-seasonal approach to assist farmers in making incremental changes over time to achieve improved herd reproductive performance.”

Healthy Hoof and InCalf are available through an excellent rural professional network, such as veterinarians, which ensures the necessary support and professional advice to either improve cow lameness or herd reproductive performance.

Visit dairynz.co.nz/healthyhoof
Forum line-up attracts farmers attendees

A quality line-up of speakers is proving a big attraction for farmers registering for the first annual DairyNZ Farmers’ Forum, May 5-6.

Speakers across a broad range of topics and backgrounds are headed up by keynote speakers, the Minister of Agriculture David Carter and Fonterra Chairman Sir Henry van der Heyden.

The pair are leading the programme on day one, covering international outlook and offshore influences they see affecting the industry in the next decade.

The Forum will be wrapped up by former Prime Minister the Rt Hon Dame Jenny Shipley who will look at global trends and the opportunities ahead for New Zealand dairying.

Plenary sessions cover meaty topics

A panel discussion on day one will cover regional challenges and opportunities from farmer, regional council and Maori perspectives.

Delegates will also see the first results of DairyNZ’s new public perception research and discuss ways of tackling the issues.

On day two of the DairyNZ Farmers Forum, three local farmers running very different farm systems, will share the key challenges they’re facing in maintaining success and sustaining their systems.

DairyNZ Chief Scientist Eric Hillerton and Professor Colin Holmes, who recently retired from Massey University, will cover the latest once-a-day milking research and what farmers are finding in practice.

Workshops offer choice

There are four workshop sessions over the two days, each run twice. Delegates can choose to attend two topics from each session, essentially tailoring the Forum programme to suit their specific interests or information needs.

Waikato dairy farmers Arthur Bryan and Noldy Rust will share their strategies and tactics to prepare for challenges in the next decade, and making the most of the opportunities.

Carbon trading will be addressed by Dr Rick Pridmore, DairyNZ’s Strategy and Investment Leader, along with Dr Harry Clark, Director of the Agricultural Greenhouse Gas Research Centre and Dr Richard Eckard, Associate Professor at the University of Melbourne.

Rabobank’s senior analyst, Hayley Moynihan, will discuss the global trends and factors likely to affect the economic outlook for dairying, along with DairyNZ’s Dr David McCall.

Dairy Australia’s People in Dairy programme leader Pauline Brightling will look at principles for building capability and taking the stress out of managing people on-farm, along with local HR specialist John Fegan.

Other topics include:

Getting the best out of genomic selection, feeds of the future, InCalf, feed conversion efficiency, better utilisation of supplementary feed, successful calf rearing, and steps to wealth creation.

The DairyNZ Farmers’ Forum is free to levy paying dairy farmers and their staff, but official registration is essential. For everyone else it’s $100 a day or $175 for both days.

The conference dinner, featuring Frank Torley from Country Calendar, is an optional ($50 per person).

The full programme and online registration is available at dairynz.co.nz/farmersforum
News in brief

Recruitment much easier, with Fencepost Jobs

Fonterra and DairyNZ are enhancing the already successful Fencepost Jobs.

This section of the Fencepost website will be the most comprehensive job and career resource in the New Zealand dairy industry.

So whether you’re looking for staff or for work, all the information you need is at Fencepost Jobs.

“It is all about attracting the best to this industry and supporting farmers who need to recruit workers,” says DairyNZ Strategy and Investment Leader for People and Business, Dr Mark Paine.

“Our aim is to make the search for the right job and the right person straightforward and hassle-free.”

If recruiting, you can place ‘situations vacant’ ads, find tips for attracting the right person, get interviewing advice and access templates to make recruitment easy.

Those looking for a job can search by category and region, place a ‘work wanted’ ad, find out how to create a compelling CV and get tips for starting your new job successfully.

The site also offers helpful tools, including HR and Compliance Toolkits, plus a career planning guide.

While Fonterra is managing the classified sections for employers and potential employees, DairyNZ is providing the recruitment and employment advice.

“Fonterra and DairyNZ are combining their strengths to offer all the information and resources you need in one easily accessible place. You’ll find everything from what to expect when working in the dairy industry through to how to advertise effectively,” says Tim Deane, Fonterra General Manager - Milk Supply.

Fencepost Jobs will now be open to the public as well.

“That means that it doesn’t matter whether you’ve been involved in dairying all your life or you are simply thinking about joining the industry – you’ll still be able to make use of a fantastic resource,” says Tim.

Find it all on Fencepost Jobs at fonterra.com

You can fill that on-farm vacancy or find the right farm job at Fencepost Jobs at fonterra.com

Get your ‘staff wanted’ ad seen by more people

Fencepost Jobs will be an open, public site that will reach the whole market - farmers and the general public alike.

Great advice at just the right time

Access templates, tools, hints and tips for getting recruitment right.

Help with finding the perfect job

Have a look at our checklist to learn what kind of jobs are ideal for you.
Science success

DairyNZ research into dairy cow fertility has been one of the most highly accessed papers in the journal BMC Molecular Biology this year.

The research, by DairyNZ scientists Caroline Walker, Dr Susanne Meier, Dr Matt Littlejohn and Dr John Roche, in collaboration with the Liggins Institute (University of Auckland), discovered two novel endogenous control genes. It is the first published study of its kind (on endometrial tissue from early pregnancy) and is the first paper from Caroline’s PhD studies into dairy cow fertility. The work focuses on differences between pregnant and non-pregnant dairy cows.

“The pregnant cow’s response to the embryo is what we are particularly interested in. By measuring the response to pregnancy at the level of the gene, we hope to identify genes associated with improved reproductive performance,” says Caroline.

The research paper has been viewed online by more than 2000 people since November.

Identification of stably expressed genes is an important first step in this research, as it enables researchers to assess how the presence of the embryo/pregnancy affects the expression of other genes.

Caroline’s research has since involved measuring the activity level of 22,000 different genes in the uterus of both pregnant and non-pregnant dairy cows. Several genes that are involved in the cow recognising that she is pregnant, have been identified. Some of these may hold the key to improving fertility in the future.

The work was co-funded by DairyNZ and the Foundation for Research, Science and Technology.

DairyNZ scientist
Caroline Walker

New CO for Central Plateau

Sharon Morrell has joined DairyNZ as the consulting officer for Central Plateau.

Replacing Denis Collins, who is now the DairyNZ Bay of Plenty Regional Leader, Sharon brings an extensive dairying background to her new role with DairyNZ.

Sharon has a first class honours degree in Agricultural Science from Massey University and has also recently completed the advanced certificate in Sustainable Nutrient Management in New Zealand Agriculture.

Alongside hands-on dairying and training roles in the Rotorua area, Sharon has also worked as a supervisor and consultant to a large-scale Central Plateau farming business.

Having grown up and sharemilked in Galatea, Sharon has a strong bond with the Central Plateau. Her consultancy, farming and environmental knowledge will be great assets to the Central Plateau, Bay of Plenty and DairyNZ.

SID 2010

Invercargill’s Stadium Southland is the venue for this year’s South Island Dairy Event (SIDE), June 21-23.

Themed ‘Opportunity SIDE’, keynote speakers include Andrew Ferrier ( Fonterra), John Penno (Synlait), Bill Gallagher (Gallagher Group), Hayley Moynihan (Rabobank), Martin Hawse (Financial Adviser) and Peter Yealands (Yealands Winery).

Watch your mailbox for more information or download a full copy of the programme at side.org.nz
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