

# Israeli likes coddled cows

Reports, photos Rebecca Turner

Dairy cows of the future will be treated like royalty, housed in shelters with toys, on a bed of soft shavings with their manure turned out daily, if the advice of an Israeli dairy architect is followed.

Yehuda Sprecher, a consultant in the design of dairy farming projects predominantly in Israel, believes it's important to consider life from the dairy cow's perspective.

After visiting farms in WA during the Dairy Innovators Forum, Mr Sprecher said he was concerned about the level of heat stress dairy cows in Australia may face.

He said dairy cows kept "in the blazing sun" would be limited in the amount of milk they could produce.

Mr Sprecher told the producers that in some European countries, dairy cow housing was now starting to look more like a greenhouse, where dairy cows were kept on soft shavings that were turned daily, creating a valuable second output of mulch.

Inside these dairy greenhouses, temperature, shade, air ventilation and food availability were closely monitored, ensuring the cows were all relaxed and content and therefore spending the majority of their energy on creating milk.

Mr Sprecher was not advocating that all cows should be kept inside.

He agreed cows were made to live outside, however not in the "blazing sun".

He said Australian dairy farmers should be learning from the world's mistakes when it came to the optimal way to house dairy cows, and his suggestion was to go back to basics and create an environment that was appropriate for the dairy cow yet economical for the farmer.

Mr Sprecher said Israel's top 50 cows were producing an average of 17,788kg of milk solids a year.

He said if these animals could do this, there was no reason why all dairy cows couldn't.

He also predicted it wouldn't be long before the average Israeli dairy cow was producing 20,000kg of milk solids per annum.



Israeli dairy architect Yehuda Sprecher told dairy farmers to start seeing things from a cow's perspective.

Mr Sprecher said feeding alleys would become a thing of the past. He said undercover pasture was the newest development in dairy architecture.

"A dairy cows environment should be open, allowing fresh air to circulate — a smelly environment is not good for cows," Mr Sprecher said.

"The future of dairy architecture is now about recreating the natural habitat, with optimal natural ventilation, no concrete and no spreading of manure using water," Mr Sprecher said.

"Many dairy farms are still using flushing to clean out feed alleys; this is not the most efficient way of cleaning. We should never make clean water dirty."

Mr Sprecher told the forum that in Canada, instead of using water for cleaning, an industrial sized vacuum cleaner was being developed to clean feed alleys.

However, it was the composting of manure daily within the dairy cow housing that Mr Sprecher seemed most passionate about.

While it was suggested that by housing dairy cows, methane emissions could be captured and then used for energy, Mr Sprecher felt the cost involved in developing such a system would far outweigh its benefits.

He said that by creating mulch from cow manure and returning this 'back to the field', the highest return and most environmentally friendly system could be developed.

Many people might assume a dairy greenhouse was simply a box to keep cows in, but the architectural designs displayed during Mr Sprecher's presentation demonstrated these modern housing designs were far from straight lines.

Mr Sprecher said dairy cows were very intelligent and it was important they continued to have human contact in their everyday lives.

He said research had proven cows with names produced more milk; however it is not the name but the attention that created this outcome.

"Cows need our attention," Mr Sprecher said. "If a cow is having fun, she will produce more milk."

Not only does a pleasant environment and human interaction help dairy cows to produce more milk, but the introduction of toys was also suggested. Balls, cow brushes and radios were some of the ideas put forward.

Mr Sprecher said that while an architect could provide the best equipment to run a dairy, it was the farmer and the way they managed their dairy that made the difference.

He said from his perspective, the future direction of dairy farming would be about farming fewer cows that produced more milk at lower carbon emissions.

■ Cartoon, page 18

## Farmers heard at WA forum

For the first time the Dairy Innovators Forum was held in WA this year.

A total of 200 dairy farmers from Australia, New Zealand and as far away as the Netherlands attended the two-day event last week, convened exclusively by dairy farmers for dairy farmers.

For some time the Australian Dairy Conference Limited board has wanted to take an event to WA, and at the time of programming, few could have predicted a 'perfect storm' of a chronically dry season and the State's dairy co-operative going into receivership.

However, resilience in addition to innovation is something which the WA dairy sector is renowned for, with this year's program showcasing exactly this mindset.

Farm visits were held at several properties including those of Victor, Denise and Kath Rodwell, in Boyanup, Ray, Donna, Mal and Lesley Kitchen, in Boyanup, Neville, Elaine and Garry Haddon, of Sabina River in Busselton, and Ed and Kate Cox, of Busselton.

On Tuesday night, an auction of one of Andrew Bines paintings raised \$3250. It sold to Ed and Kate Cox, of Waterhatch Dairies in Busselton.

# Kiwi group strikes while the iron's hot in Chile

A group of New Zealand farmers have moved onto the Chilean dairy scene and is about to list a corporate dairy farming company, with 17,500 cows in milk, on the Chilean stock market.

New Zealand dairy farmer Arthur Bryan is one of four directors of Manuka, a dairying company that owns 22,500 hectares of land in Chile.

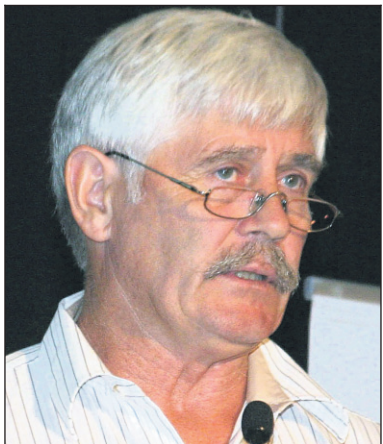
Speaking at the Dairy Innovators Forum, he said the driver behind the project was demand for protein on the back of food security concerns as the world's population grows.

"World population is increasing at the rate of approximately 70 million per annum and there is a growing middle class in developing countries such as China," he said.

"This middle class has an appetite for protein, a lot of which comes from milk and meat."

With this taken into account, Mr Bryan was asked to become part of a group looking to invest in dairy land in Chile about six years ago.

Mr Bryan said "a lot of due dili-



New Zealand dairy farmer Arthur Bryan.

gence" was carried out in Chile to determine if the country was the right place to invest.

He said the key areas looked at were whether Chile was politically stable, welcomed foreign investment and had an efficient tax system with a reciprocal tax agreement with New Zealand.

Good soils, climate and reasonably well distributed rainfall with suitable temperatures were also considered, as well as the availability of reasonably priced land, good infrastructure, the availability of labour, processing facilities, reasonably priced inputs, reliable electricity and no major disease problems.

Mr Bryan said Chile had ticked all the boxes and so the decision to invest was made.

Currently, Manuka is milking 17,500 cows but plans to reach 43,000 cows in milk by 2019.

Manuka's production model is based on grass being the main source of diet for the cows, which consist of mainly North American bloodlines.

Mr Bryan said the quality of cows was the biggest limitation on the operation; however this was being tackled through the introduction of semen from New Zealand Jersey sires.

Pasture management was based on the New Zealand system with the eradication of weed species of particular importance.

In terms of acceptance in the community, Mr Bryan said this was an area the company was actively trying to manage at all times.

He said breaking through social protocols when training staff was also challenging.

"We have a lot of very good young people working for us," Mr Bryan said.

"In Chile social norms mean that there are some people who are happy to put cups on cows for ever, while others think it is their job to float around in a ute pointing the finger," he said.

"We are trying to break through that."

Mr Bryan said the possibility of Manuka reaching an annual production of 300 million litres of milk was not unrealistic.

In 2010, Manuka's production reached 79 million litres compared to 61 million litres in 2009, with the company aiming to reach 230 to 240 million litres of milk production in 2019.

Chile has an estimated 16,000 dairy farmers with about 617,000 cows in production on 800,000ha. Eighty per cent are considered small producers and the dairy industry employs directly and indirectly around 35,000 people.

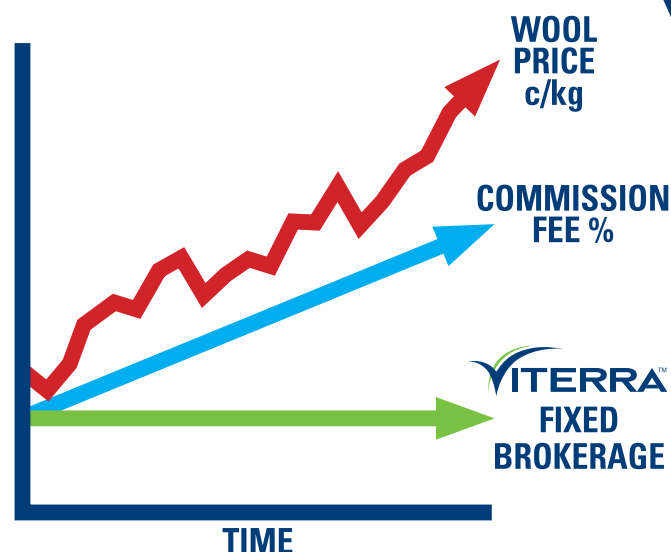
In 2009, total milk production was 1.77 billion litres which dropped 10.1 per cent on 2008 figures. In 2009, milk exports also dropped to 290 million litres, a decrease of 28 per cent in volume exported.

Projected production increases during 2010 are expected to record increases in total and export quantities of milk.

Mr Bryan said Manuka shareholders were receiving a return of 3.5 per cent and the company was looking to broaden its shareholder base.

He added that it was running dairy farms in New Zealand which had sharpened his ability to ensure milk was produced at the lowest cost.

"In New Zealand, you can't afford a high price structure," Mr Bryan said.



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