

Supporting the New Zealand cow

New Zealand veterinarian Claire Nicholson BVSc, chief executive and founder, Sirona Animal Health Partners, discusses milk prices and dairy farming in New Zealand with Matt O’Keeffe

Claire Nicholson recently travelled to Ireland this summer on a fact-finding mission. She set up her own animal health pharmaceutical company in New Zealand in 2012 and regularly updates her product range in order to provide the best service possible to her farmer customers. With Irish ancestry on her father’s side (O’ Brien from Kerry), Claire already had an affinity for the country and felt that Irish farming practices was the nearest to what she had experienced in New Zealand. The precise reason for her visit was to investigate the possibility of using Animax products. The UK-based company has a wide customer base in Ireland for its trace element, slow-release boluses. Claire emphasises the efficacy of the products she sells: “The priority has to be consistency, in terms of a dependable, slow-release product that can provide the animal with the trace elements it requires as well as providing peace of mind for the livestock owner. Obviously, production, reproduction and the general health of the animal are the kinds of improvements in animal performance that should result from the investment.”

INCREASED COW STRESS

One of the side effects of the collapse in milk prices in New Zealand has been an increase in the stress on livestock, as Claire explains: “With the cut in milk prices, inputs have been reduced. To counteract that, farmers have engaged in destocking, to reduce the pressures on animals but there has certainly been a noticeable loss in performance and in animal condition on many farms.” The veterinary surgeon described changes in New Zealand dairy farming: “In recent years, New Zealand farmers have been increasing stocking rates, putting more pressure on pasture and driving more production from cows. This has required additional supplementary feeding in order to maintain and increase output. What the milk price drop has done is to force farmers to go back to the pasture-based production system and take a good look at what they are doing in terms of managing their herds and farms to best effect.”

POSITIVE REDIRECTION

Claire thinks that this redirection could result in a healthier cow: “Much of the feed supplementation that New Zealand farmers use, consists of palm kernel (PK) meal, though some farmers do use a total mixed ration (TMR) diet. Fonterra, the largest milk processor in New Zealand, has recently introduced restrictions on the amount of PK that farmers can use. Interestingly, that has more to do with environmental issues than any possible animal health problems. The restrictions were introduced because of growing concern over the environment, specifically the damage that is being done to rainforests.

“There has been a huge clearance of these forests in order to grow palm trees to satisfy the increasing demand for palm kernel, mainly from New Zealand dairy farmers. As well as the other long-term consequences of mass forest clearance in Malaysia and Indonesia, there are issues around destroying the orangutan habitat as well.”

VET AND FARMING BACKGROUND

Claire was involved in large-animal practice before she established her company. She has experienced farming and practicing as a vet in the UK as well as New Zealand and other parts of the world. “Ireland seems to be the closest animal management system to New Zealand that I have seen, more so than Australia or South America. Really, the only big difference is the winter housing in Ireland and even there, we are starting to realise in New Zealand the impact that the cold, wet conditions can have on animals. So, more herd homes are being built in New Zealand to take cattle off the land during the dry cow period and in very wet conditions. In general, farmers in New Zealand are very positive about this, with animal welfare a high priority for them.”

SCALE DIFFERENCES

Average milk production, as quoted by Claire, is around 375kg of milk solids per animal. “That’s a long way off what is being achieved by many Irish farmers.

However, that’s on the more pure



SNAPSHOT: 2015/2016

If we look at 2015/2016, it has been challenging, both from an economic and climatic perspective, for many farmers. Both are resulting in significant animal health issues with long-term ramifications. The dairy payout has been lower than break even for the majority of farmers for the last two seasons. While most were able to continue business as usual for the first year, the second year has forced many to make drastic reductions in costs. Unfortunately, this has impacted on animal health programmes, with many stopping vaccination programmes, such as bovine viral diarrhoea (BVD) and leptospirosis, metritis treatment, parasite management, trace mineral supplementation and facial eczema (FE) prevention. As a result, many farmers have experienced high, empty rates, animal deaths and poor production. Climatic conditions have also presented some difficult challenges. The east coast of both New Zealand islands have suffered severe drought over the last two summers. In some areas, this has continued through into the winter. With supplementary feed supplies declining and the economic returns decreasing, farmers have struggled to feed animals to sufficient levels. This has resulted in poor body condition at the time of mating which contributes to high empty rates in dairy and beef and low lambing percentages and lamb growth rates in sheep.

The areas that were not in drought had very high levels of humidity resulting in the highest level of FE challenge on record. FE is caused by a toxin released by the fungus, *Pithomyces chartarum*, called sporidesmin. This toxin results in the enlargement of the bile ducts thus inhibiting the livers ability to process chlorophyll. The build up of chlorophyll results in an increase in sun sensitivity leading to the classic visual signs of sloughing of unpigmented skin and oedema of the face and ears. FE also has many subclinical effects, which show up well after the FE season has finished. These include sudden death at calving and lambing, poor conception rates for the next season, low milk production, poor lamb growth rates and a decrease in parasite resilience. It is estimated that this disease in a normal year costs the NZ farming industry NZD\$75m. In a season, such as the one we have just had, it could be at least doubled. The only known preventative treatments are zinc, pasture spraying with antifungals and moving to safe pastures (the fungus is only associated with ryegrass), all of which have their limitations.

Another recent challenge to NZ cattle, is the appearance of the blood parasite, *Theileria*. *Theileria* is transmitted by the cattle tick, *Haemaphysalis longicornis*. It is an intracellular blood parasite that causes anaemia and at worse death. Treatment and prevention options are limited. It first appeared in 2013 and is now spread throughout the north island and the top of the south.



pasture-based New Zealand farms. The average herd size is 420 cows, so, that's another significant difference between New Zealand and Irish dairy farms. We do have dairy farms that have herds of up to 12,000 cows." Claire does not see this large-scale dairy farming changing: "I think the size of New Zealand dairy farms and herds will continue to increase. There will continue to be amalgamations of units. That's particularly evident around Taranaki, one of the last bastions of smaller scale dairy units, where farmers are amalgamating in order to achieve the economic benefits of scale."

LONG-TERM MILK OUTPUT FORECAST

When asked whether she could foresee a reduction in milk output on foot of the low milk prices farmers are receiving, Claire said no: "The milk price will determine what happens in the future. Because of the decrease in stocking rates, a follow-on reduction in output is inevitable in the short-term. The fact that the past season was a particularly good grass-growing period, meant that milk production did not go down as much as anticipated."

ADDRESSING DEFICIENCIES

New Zealand dairy farmers are caught in something of a bind as Claire outlines: "Because land prices are still very high, the only way a farmer can increase output is by increased intensification. That, in turn, makes the exercise more costly and requires greater farm and animal management." Claire's animal health pharmaceutical company, Sirona, is called after the Celtic goddess of healing, which is precisely why she chose the name. "I have found that farmers are very receptive to the products that I sell. There is a good understanding that most farms have deficiencies and that they require supplements to counteract those deficiencies. The key to what I offer is how those supplements are delivered and the results gained from them. In general, farmers need greater consistency in terms of achieving long-term performance improvements and value from trace element and vitamin supplementation. There is also a clear necessity for farmers to manage their animals well as there is increasing criticism and scrutiny of animal and farm management in New Zealand. This has put pressure on farmers to ensure that their farming practices are environmentally acceptable and that their animal welfare management is improved."