



Ruakaka dairy farmers Stephen Holland and Brianna Templin.

Feed pad roof turns liability into asset

GARETH GILLATT

A RETRO-FITTED roof turned a feed pad from a 'complaint risk' to a worthwhile asset says its Northland owner.

Ruakaka dairy farmers Stephen Holland and Brianna Templin milk 220 cows on 132ha. Sandy peat type soil makes the property difficult to farm in dry years and especially as all the herd's replacements are kept onfarm.

To cope with extra feed requirements of year-round milking Holland set aside 9ha for a maize crop and built a 105 x 10m feed pad.

A crop yield of 25-30 tonne/ha proved enough to keep cows producing well. The herd was on the pad constantly throughout the previous season as the dry summer led into the autumn and there was little available grass for cows in the paddocks.

However, it was the torrential rains of late autumn that caused the most problems when the water flowing off the concrete feed pad caused Holland's effluent system to overflow leading to warnings from the regional council.

"We tried using spray irrigation and our slurry wagon but the water coming off the concrete into the ponds was too much cope with and within the space of the year council demanded that I increase the capacity of my ponds."

Also, the feed bins would fill up with rain and they had to empty them before being able to feed out again. "I

worked out I would have needed four times the amount of effluent storage capacity, from 5000m³ to 20,000 m³, just to cope with the water coming off the large surface area of the concrete feed pad."

Holland decided roofing the area might be a better option.

A discussion with Herd Homes owner Tom Pow suggested roofing most of the feed pad would be a cost

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effective solution with more benefits than larger ponds. "We talked before winter, in March, and the roof was up by end of May. They probably did it in less than six weeks."

Herd Homes put up poles around the outside of the 105 x 10m area, covering 94 x 10m of it with a clear plastic roof.

A bunker area is set aside at the end of the structure to collect dried effluent scraped off the pad.

Holland says the result was so big and so marked it was as if someone had turned off a tap. "The runoff completely vanished. Not one ounce of water comes off the feed pad even in the pouring rain."

Effluent was so dry that while Holland has been using the pad every day since the start of June he hasn't needed to scrape it off once. The material dries to form a 15mm crust made up of 80% dry matter.

Pow says it was the first feed pad the company had covered and the

company set out to get as much air and light into the structure as possible.

The material is so dry it could be used to grow root vegetables, he says. "Tests by Hill Laboratories show that e-coli is extremely low in the mat meaning it could be used in vegetable gardens."

Holland plans to use the muck as an impromptu stock mat before spreading it onto the maize paddocks in autumn. "The buildup of dried muck protects the cows feet from stones on the bare concrete so there's no reason to get rid of it.

"Once we get to the point it has to be shifted we'll just peel it off the pad and spin it onto paddocks with a muck spreader."

Holland says the roof has already paid for itself by reducing stress and time spent trying to get supplementary feed to the cows and pasture damage.

"With the cover in place we don't have to wait for a fine part of the day to put the feed into the bins or rush to get the cows on. Now it doesn't matter when we feed out. With the covered feed pad it's a very simple exercise."

There are other uses says Holland and he also intends to keep his loaded silage wagon in the structure to keep it dry before feeding out. "The 3.6m stud roof means you can load up the wagon and park it in the shelter until you need it. There are lots of things you can do with it."

Tel. 07 857 0526

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