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DoloZest® News

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A quiet revolution

For the last 50+ years the price of commodity dairy and meat products has trended downwards, and that pattern shows no sign of changing.

Land prices and farm costs have steadily risen and there's no guarantee that either will come down significantly.

Larger farming operations may have some economic advantages. However the most robust and efficient operations are those where there is a long-term commitment coupled with a love of animals and the land.

When wisdom and knowledge are passed down from generation to generation a real resilience develops, and tough times are coped with, knowing that when fundamental change is required the farming community will find the resolve, determination, and resources to make it happen.

Change is constant, and one of the most rapidly shifting is consumer demand. High quality sustainably grown food is being demanded by many more people world-wide, and there is the money to pay for it.

Clean and green is no longer sufficient to make farming pay. Genuine quality is what's required. Food purchasing decisions are highly emotive, and the production story provides the justification; both are essential if we are to prosper.

The quality of what leaves the farm is determined by the land, particularly the health of the soil.

Produce from properties where the soil is teeming with life and fertilised with products providing all essential major and minor minerals, is superior in all respects.

There are a growing number of our clients already working together or individually to market their own meat or milk. Multiple measures of meat and milk from a number of properties over the thirteen years we've been providing DoloZest and CalciZest based total nutrient programmes show clear advantages.

Important concept! When there is a sustainable lift in pasture production the quality also

improves. Well-structured soils with the necessary nutrient inputs **always produce more** than properties where soils are compromised in some way.

CalciZest and DoloZest were based on work undertaken by DSIR more than 50 years ago that stated that biological activity in the soil was equally important as the supply of nutrient by fertiliser, and the stimulation of the biological processes was essential for best results.

What grows is governed by soil conditions. Clover and grass-based permanent pastures require specific conditions for optimum performance, and when the conditions are favourable pastures steadily move from lower to higher fertility, without renewal.

What grows above the ground is the visual manifestation of life beneath, and increased yield can only be obtained by first stimulating soil life.

Higher fertility grass and clover generally grow taller and are able to harvest more sunlight and photosynthesise more efficiently, resulting in highly palatable evenly grazed pasture.

Efficient rumen function in stock means outstanding growth rates and yield. With improved digestion dung is more rapidly reabsorbed into the soil.

The speed at which nutrient is cycled is just as important as the levels of soil nutrient. Soils with modest natural levels and historic fertiliser inputs are capable of high levels of production, providing that the conditions favourable for clovers have been created.

It's no longer necessary to apply large amounts of 'capital fertiliser' in the hope that sometime in the future there will be a financial return.

CalciZest and DoloZest contain biological inputs in the form of selected beneficial fungi and bacteria that speed the breakdown of dung, dead grasses, and thatch, increasing the rate at which nutrient moves from tightly-held to plant-available.

Sunlight

Successful pastoral farming is about efficiently converting sunlight via photosynthesis into usable energy that can be used to generate income, either by selling pasture or converting it via an animal.

Direct sunlight during winter and spring provides major benefits. Pastures contain more energy and stock require fewer kilograms of feed to be satisfied.

Utilisation of pasture is higher. Frosts when followed by bright sunny days lift moisture from the soil and although growth at the time may be slower under these conditions, soils warm more quickly and rapid spring growth is only a warm rain away.

Keeping the grazing intervals as long as practical prior to the onset of rapid growth allows plants and soils to recover from the last grazing. Leaf size is optimised providing a larger surface area for energy conversion.

Nitrogen fertiliser and carbon levels

Our website, www.esi.org.nz has a recently received article on work by three scientists at the University of Illinois. It's a fascinating piece which, if correct, may explain the reduction in

soil carbon levels and pasture production over the last thirty years from dairy land in New Zealand.

Spring nutrient options

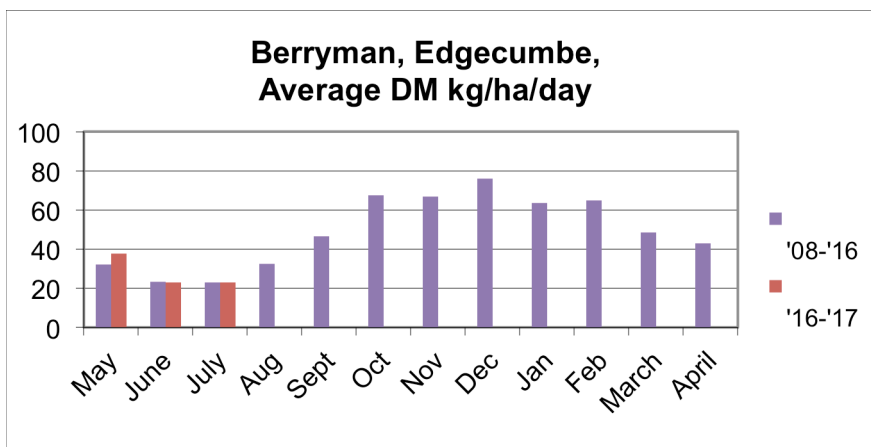
Our Spring mixes usually contain CalciZest along with sufficient phosphorus, potassium, and sulphur for strong pasture performance over the growing season.

CalciZest was designed specifically to promote clover growth. Phosphorus and sulphur are essential growth elements however, on farms with higher than required historical inputs, it may be possible to reduce or possibly withhold these elements this season.

Potassium availability seldom limits production while soils are moist, deficiencies usually only becoming apparent as soils start to dry in early summer. In well-structured soils rich in biology, plants are able to extract potassium from well below the standard soil test depth, so it may be possible to reduce potassium inputs this spring.

Soil test information, along with historical inputs, is useful in determining this season's input.

Please phone or email at any time for a mix tailored to your property's requirements.



Ave. daily growth, Berryman	'08-'16	'16-'17
May	32	38
June	23	23
July	23	23
Aug	33	
Sept	46	
Oct	67	
Nov	67	
Dec	76	
Jan	63	
Feb	65	
March	49	
April	43	

Spring growth after wet winters is often delayed, as it takes time for soils to dry and warm sufficiently for really strong growth. Soil temps taken over recent days show soil temperatures in some districts well above 10°C indicating that strong growth may be close. However, wind from the south is common in September and it is not until the last ten days that growth really gets underway.

Keeping grazing intervals as long as practical and filling the gap with whatever high energy and fibre supplement is on hand is still the best option.

Regards,

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